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THE PROCEDURE OF CONTEMPORARY RAILROAD REORGANIZATION[1]

The procedure followed at the present time in effecting the r organization of an American railway system has develop through a series of precedents, each one of which was establish originally more through accident than forethought. Ordinarily fundamentally important mode of procedure, in financial as well other social affairs, results from a slow and tempered growth precedents, all of which are firmly rooted in the common or th statutory law, and all of which are constantly balanced off again contemporary social opinion. The history of the organization the business corporation, the history of the public franchise, th history of the practice of corporate taxation, are all illustratio of the orderly and well regulated development of a body of w considered precedents, consistent at all times with the law a public opinion. Not so the present practices governing the r organization of railways. They have arisen through immedi necessities; they have come into existence at times when any actio legal or illegal, impetuous or reflective, was better than no actio

Four separate and often antagonistic sets of motives govern procedure to be followed in the reorganization of a railroad. T most important and usually the least apparent is concerned w the human or psychological elements. Most writers on finan taking their promptings from published circulars and reports, f get the interplay of human motives, ambitions, antagonisms, friendships that underlie every financial episode of importance. railroad is reorganized by men, not puppets; its officers, its c itors, its security holders, the attorneys and the judges are mere thinking machines, but ordinary men, subject to human e tions and weaknesses. First, then, the procedure must be suc to allay, not aggravate, the friction incident to the conflict of sonalities. The second set of motives governing reorganiz procedure is economic. Leases must be continued or abro branch lines rebuilt or closed, rights enforced or surrender

[1] This article follows one on "The Theory of Railroad Reorganization" published in the December, 1918, number of the AMERICAN ECONOMIC REVIEW (VIII), p. 774.

accordance with the single question—Is it profitable? No railroad can be permanently successful and serve the public well which does not pay its operating expenses, including fair wages to its employees, with adequate upkeep of its plant, and in addition a fair rate of return on the invested capital. And the reorganization procedure must recognize this simple economic imperative. The third set of controlling motives is legal and judicial. Experienced students of legal practice have worked out certain more or less clearly defined lines of orderly procedure. Some of these lines of procedure have been prescribed by the courts, others are merely tolerated by the courts because they facilitate the regular course of the reorganization, and others, arising from the ingenuity of lawyers, are followed until some court decision condemns them. Lawyers are apt to exaggerate their own importance and the significance of their legal machinery in determining the form and details of reorganization procedure, forgetful that a reorganization is primarily an adjustment of human motives and economic conditions, circumscribed, rather than determined by the law.[2] The fourth set of motives—only recently of importance—is the rulings and requirements of public service commissions. In theory, at least, the public service commission requires that the course of the reorganization shall not jeopardize any of the rights of the public. The present orderly procedure of a railroad reorganization has been built up from the interplay of these four sets of motives.

The chronological steps in the procedure are strikingly uniform. The first sign of impending trouble is the decline in the railroad's credit. This is usually a matter of common knowledge in financial circles. The weakness will have shown itself in at least three direc-

[2] As stated in another connection, "One may hazard the guess that there is no field of modern economic relations where legal phrases count for as little as in railroad reorganization; and as time passes their significance seems to become less." A. S. Dewing in the AMERICAN ECONOMIC REVIEW, vol. VI (1916), p. 907. The earliest clear acknowledgment by the judiciary itself of this fact, that I can find, is a statement by Chief Justice Waite some twenty-five years ago: "It rarely happens in the United States that foreclosures of railway mortgages are anything else than the machinery by which arrangements between creditors and other parties in interest are carried into effect." Can. So. Ry. Co. *v.* Gebhard, 109 U. S. 539 (1883). It is noteworthy that this admission that legal steps constitute the "machinery" for accomplishing economic ends, is quoted with approval by Cravath in his essay on the legal procedure (n. 11). On the other hand, lawyers and judges would give the impression that legal procedure embraces about all there is to a reorganization.

tions in the months preceding a railway failure, and an astute student of railways would probably discover other indications of falling credit. The company's securities have declined in quoted value on the exchanges where they are dealt in, the company itself has paid increasing rates of interest and has borrowed on rapidly maturing, miscellaneously secured notes, and the general property of the company, particularly its rolling stock, has been allowed to depreciate. For a considerable period the earnings also will have been declining, but invariably this decline will have been attributed to transitory and superficial causes rather than to any cause sufficiently deep-seated or permanent to suggest an impending crisis. The three signs of weakness alluded to above, accompanying or following steadily failing net earnings, are prophetic of failure.

The exact time at which the failure of a railroad is publicly acknowledged is largely at the discretion of the directors. The explicit failure of an industrial company may come suddenly, as the immediate consequence of a labor strike, a panic, or a bank failure; but a railway failure, invariably due to deep-seated, slow acting causes, may be postponed or quickened at the discretion of those in immediate control. At all events, when the financial and operating conditions of the road reach such a pass that a crisis seems inevitable to the management, one or both of two steps are taken—the organization of protective committees and the petition for the appointment of a receiver. Sometimes committees close to the management are formed before failure has reached a crucial stage, one of their avowed purposes being to prevent or forestall receivership proceedings;[3] and sometimes receivership proceedings are brought suddenly, and almost at the last moment, before the management has an opportunity to organize a "stockholders' committee." Thus no general rule can be laid down covering the order of these two events, but the public acknowledgment of financial failure is indicated if one or the other or both of them occur.

The organization of protective committees is more important than the receivership proceedings, the latter being a legal formality now often dispensed with. The committees arise from approximately five different sources. Invariably there is a stockholders' committee, usually dominated by the old directors of the road.

[3] Protective committees for the Missouri Pacific Railway were organized in 1914 in the hope of effecting a "readjustment" (a delicate word for reorganization), and the petition for receivership was not made until August, 1915, when it was found that this "readjustment" could not be effected.

This committee acts on the defensive; throughout the whole course of the reorganization proceedings the stockholders' committee is engaged in explaining and justifying the past management on the one hand, and haggling with the other committees in regard to the extent of the sacrifices which the old stockholders must undergo in order to regain the control of the road. The other four types of committees are representative of bondholders. There is usually a committee or committees of junior bondholders, of the senior bondholders, of branch and divisional line bondholders, and of the bondholders of subsidiary lines or terminal properties controlled through leases or operating contracts. These committees of bondholders are formed and dominated by the investment banking houses which were responsible for the original sale of the bonds to the public; if the bonds were distributed long ago, prominent trust companies or life insurance companies may assume the guiding hand.

The junior bondholders' committee or committees will stand antagonistic to the committee of stockholders. They will insist that the junior bondholders shall endure as little sacrifice as possible, and that the full brunt of the burden of reorganization shall fall on the stockholders. The committees of senior, branch and leased line bondholders will assume throughout an attitude of watchful waiting. In the majority of cases, especially if the property covered by their liens is strategically important for the unity of the railway system, they will be called upon to take little part in the reorganization. If, as is the case in comprehensive reorganizations, they are required to fund their bonds under new first and general mortgages, they will be able to prescribe the conditions which the junior bondholders and stockholders must accept.

In the older reorganizations, there were more committees than at present.[4] The tendency now is to have few committees and to have these few thoroughly representative and endowed with

[4] For example, before the Union Pacific reorganization had been accomplished, no less than fifteen committees had been formed. There were committees representing the first mortgage bonds, the consolidated mortgage bonds, the collateral trust 5's, the collateral trust 4½'s, the Oregon Railway and Navigation Consolidated bonds, the Dutch bondholders, two committees each for the Kansas Pacific consolidated bonds and the Denver Extension bonds, a joint committee of foreign bondholders, and various committees representing branch line bonds. See S. Daggett, *Railroad Reorganization* (Harvard Economic Studies, vol. IV, 1908), ch. VII.

considerable power.[5] It facilitates matters very much if the important committees agree among themselves over the formation of a general reorganization committee upon which representatives of the different committees serve. Not only does such a general committee tend to ease the tension and remove misunderstandings, but it makes possible a unified and far-sighted policy of investigation during the period pending the reorganzation, and it does away with unnecessary public discussion and rankling over successive plans of reorganization. Such a general committee assumes the burden of preparing a plan of reorganization in the interest, ostensibly at least, of impartial justice.

While the formation of committees is entirely a matter of invitation and mutual agreement, there are very distinct responsibilities attached to membership on important reorganization committees. Formerly membership was more or less a matter of accident, or at most a privilege attaching itself to the ownership of a considerable block of securities the value of which had been placed in jeopardy by the financial crisis of the road. In consequence, members of important committees were often men of little intelligence or familiarity with railroad finance; quite generally they had no standing beyond their own cities. At the present time, however, the custom is to have well known, highly responsible men serve on the various reorganization committees; men are chosen more because of their national standing in banking and railway circles, their integrity and proved wisdom and financial experience, than because of ownership or control of securities. And such a personnel is wise. Railway reorganization requires highly expert and specialized knowledge. The greater the number of reorganization committees a man has served upon, the greater is his value, and after a time he acquires a kind of national reputation for skill in this particular field. He will not be responsible for a reorganization plan likely to jeopardize his reputation for honesty and impartiality. Moreover, the plan of reorganization finally agreed upon by men of acknowledged responsibility and

[5]The practice is becoming clear, as a whole, for as many classes of debt and security holders to organize themselves into committees as there are substantial equitable interests in the corporation's property, but no more than is absolutely necessary. A duplication of committees, representing the same interest and differing only in personnel, is frowned on by the courts and achieves no other end than a break on the course of the reorganization. The effectiveness and responsibility of committees will vary directly as the authority vested in them.

expertness will receive public approval much more readily than a plan advanced by less well known men. This general tendency to have a reorganization supervised by highly responsible experts, rather than by holders of large amounts of securities, is in general accord with the tacit acknowledgment that a railroad reorganization is a public and not a private matter.[6]

As soon as each committee is formed, it organizes itself, selecting one member to act as chairman.[7] A legal counsel is chosen and some trust company is asked to receive the deposit of securities under a general agreement according to the terms of which the committee is empowered by those depositing their securities to act for them and in their stead. The powers conferred on the committee by this deposit agreement are very general, and the tendency of recent years is to enlarge them. In fact, it may be said that the committees are trustees for the depositors under their agreement acting with all the powers possessed by the owners separately and with the additional powers that their majority control involves.[8] We shall return presently to the procedure in connection with the formation and organization of committees.

[6] From the above account, it should not be inferred that reorganization committees "constitute themselves," as it were, out of a clear sky. Ordinarily some banking house has been the acknowledged sponsor for the railroad, through the sale of large blocks of bonds. This banking house will "invite" prominent bankers to become members, thinking by so doing to give added respectability to their committee. The directors, similarly, will "invite" other prominent bankers to serve on their stockholders' committee.

[7] Great care must be taken that the committee members, particularly the chairman, shall be free from partiality, else the court may permit a duplication of committees, thus impeding the reorganization. In the recent reorganization of the Chicago, Rock Island and Pacific Railway, the president of the trust company, which was trustee of the bonds upon which the foreclosure suit was based, was chairman of the bondholders' committee. The court considered this a dual position, and permitted a minority bondholders' committee to intervene, thus creating unfortunate complications.—*Central Trust Co.* v. *C. R. I. & P. R.R. Co.*, 218 Fed. 336 (1914).

[8] The legal powers of reorganization committees acting under modern deposit agreements have been briefly summarized in a lecture before the Harvard School of Administration by the late Adrian H. Joline, than whom there have been few abler masters of reorganization procedure.

"There is conferred upon the Committee all the rights and powers of owners of the deposited securities and full discretion as to the methods of carrying out the agreement, with power to construe it.

"The Committee is usually authorized to maintain necessary suits; to sell the deposited securities under certain restrictions appropriate to the case; to put in motion suits to foreclose mortgages; to purchase the property at any

The character and the significance of the legal aspects of a reorganization depend, very largely, on whether or not a receiver is appointed to administer the railroad during the period between the financial crisis and the final consummation of the reorganization. This, in its turn, depends on whether or not there is likely to be acrimonious and prolonged dispute among the various security holders, or a recalcitrant group of security holders, likely to impede or frustrate an amicable settlement of conflicting interests. If the failure is very serious, thus entailing large losses to all concerned, or if it involves a large railway embodying many conflicting interests, or if there are burdensome leases and contracts which must be abrogated at all hazards, then receivership proceedings are necessary. Through a judicial sale of the bankrupt railroad's property, the court can either force a recalcitrant minority to accept what it considers a just reorganization plan or it may extinguish the interests of the minority. But if the various security holders can arrange a plan of reorganization among themselves, without resort to the machinery of the courts, the whole reorganization can be carried out with little outward formality. A court receivership is expensive, destructive of "goodwill" values, hurtful to the road's general credit, and places in jeopardy valuable franchises which may have been granted years before when legislatures and commissions observed a beneficent liberality toward railroads. A reorganization consummated without compulsory pressure exerted by the courts through judicial sale, even though a receiver be appointed at some stage in the proceedings, is called *voluntary*; one consummated through the coercive authority of the court, represented by a judicial sale of the old railroad and the organization of a new railroad corpora-

sale, using the deposited securities so far as may be in payment of the purchase price, with power to borrow money necessary to complete the payment and to assign the bid or otherwise use the property to secure repayment of the sums borrowed; and to convey the property to a new company or otherwise dispose of it subject to the conditions set forth in the agreement.

"The Committee generally has power granted to it to limit the time for making deposits; to employ counsel and assistants; to receive reasonable compensation, sometimes limited to a certain percentage on the face value of the deposited securities, and to have its expenses paid subject usually to a like limitation. The Committee is frequently authorized to borrow money and to pledge the deposited securities as collateral for the loan, for the purposes of the agreement, the protection of the depositors, the preservation of the property, or to defray expenses.

"Depositors incur no personal liability for expenses, but the deposited securities constitute the fund for that purpose."—Lectures, p. 12.

tion, is called *involuntary.*[9] The vast majority of railroad reorganizations are involuntary, and follow a court receivership, although from time to time voluntary reorganizations have been attempted for large railway systems, sometimes successfully.[10]

In the vast majority of cases, the first step in the legal procedure of a railroad reorganization is the appointment of a receiver by a court of equity.[11] It cannot, however, be stated that

[9] There is possible a kind of threefold classification depending on legal sanctions:

Voluntary, without receivership: when failure is due to temporary causes, that operate relatively slowly, or the difficulties are easily adjusted by the security holders. Common among industrials, local public utilities and small railroads. Rare for large railway systems. The Atchison reorganization of 1889.

Voluntary, with receivership: when failure is due to temporary causes, operating quickly, or when valuable property with large equities meets sudden disaster. Very common among industrials of all classes. The common form of voluntary reorganization among railroads. The Baltimore and Ohio of 1899.

Involuntary, with receivership: the ordinary form. Almost universal among railroads and commonest among industrials and local public utilities.

[10] In the summer of 1915 a voluntary reorganization, without receivership, was attempted for the Missouri Pacific Railway. As a voluntary reorganization it was unprecedented in the history of railroad finance for the radical sacrifices demanded by the branch line and junior bondholders. To accomplish the coöperation of these bondholders and of the assessed stockholders, the committees pointed out that a receivership, entailing much added expense, would be necessary unless the security holders willingly consented. They refused. A receivership followed, and under the authority of the courts the identical plan of reorganization was forced upon the security holders at greatly increased expense to the corporation.

On the other hand, the great reorganization of the Baltimore and Ohio Railroad in 1899, entailing considerable sacrifice, was finally consummated without judicial pressure. This was, on the whole, the most remarkable case of a voluntary reorganization.

Out of over five hundred railroad organizations between 1884 and 1900, examined by Meany (*Poor's Manual of Railroads,* 1900), sixteen were voluntary. Since 1900 about a tenth of those capital readjustments, sufficiently comprehensive to be called reorganizations, have been of the voluntary type. There have been numerous "readjustments" accomplished without receivership or pressure upon the security holders, but they cannot be considered as substantial reorganizations.

[11] The appointment of a receiver to conserve property is one of the so-called "extraordinary remedies" allotted by our Anglo-Saxon law to the equity courts. Such courts "will not lend their aid by the appointment of receivers when the persons seeking the relief have ample redress by the usual course of proceedings at law, or when the law affords any other safe or expedient remedy."—J. L. High, *A Treatise on the Law of Receivers,* p. 16.

The court of equity can exercise its discretion as to whether it will appoint

all railway receivership proceedings arise from anticipated or actual failure.[12] Historically the current procedure has developed by a slow evolution. It represents the gradual transition from a complex, haphazard procedure to enforce railway obliga-

the receiver.—*Mil. and Min. R. R. Co.* v. *Soutter,* 2 Wall. 510 (1864). Also 8 Biss. 247.

The position of a receiver is very concisely described by Baldwin, J.: "By means of the appointment of a receiver, a court of equity takes possession of the property which is the subject of the suit, preserves it from waste or destruction, secures and collects the proceeds or profits, and ultimately disposes of them according to the rights and priorities of those entitled. . . . The receiver appointed is the officer and representative of the court, subject to its order, accountable in such manner and to such persons as the court may direct, and having in his character of receiver no personal interest but that arising out of his responsibility for the correct and faithful discharge of his duties."—*Beverly* v. *Brooke,* 4 Grat. 208.

The duties of receivers for public service corporations are briefly described by Judge Lacombe: "Their (the receivers') sole functions are to hold the property intact, operating it as efficiently for the public service as their resources will permit, to ascertain the liabilities, to marshal the assets and eventually........to sell it to the best advantage and to apply the proceeds rateably to the payment of the liabilities."—*Penn St. Co.* v. *N. Y. C. Ry. Co.,* 157 Fed. 442 (1907).

For brief but comprehensive accounts of the appointment and duties of receivers see the two essays by J. Byrne and P. D. Cravath in a book entitled *Some Legal Phases of Corporate Financing Reorganization and Regulation* (Macmillan, 1917), being addresses delivered in 1916 at the instance of the Association of the Bar of the City of New York by distinguished practicing lawyers. These two essays, together with the lectures by the late Adrian H. Joline at Harvard, are the best available brief summaries of legal procedure of a modern corporate reorganization. The book of essays will be frequently referred to under the title of *Some Legal Phases,* etc.

There have been a large number of periodical articles dealing with railroad receiverships: H. C. Caldwell, "Railroad Receiverships in Federal Courts," *American Law Review,* vol. 30 (1895), p. 161; A. S. Bennett, "Railroad Receiverships," "Oregon Bar Association Proceedings, vol. VI (1886), p. 47; J. F. Crowell, "Railway Receiverships in the United States," *Yale Review,* vol. 7 (1898), p. 319; H. H. Swain, *Economic Aspects of Railroad Receiverships,* Economic Studies, vol. 3 (Am. Econ. Assoc., 1898), p. 53; S. Daggett, "Recent Railroad Failures and Reorganizations," *Quart. Journ. Econ.,* vol. 32 (May, 1918), p. 446. Special articles will be referred to under special topics. For general works see W. A. Alderson, *A Practical Treatise on the Law of Receivers;* J. L. High, *A Treatise on the Law of Receivers;* S. W. Jones, *A Treatise on the Law of Insolvent and Failing Corporations.*

[12] In the first place, especially of recent years, receivership proceedings have been instituted or threatened by state or federal officers for alleged violation of the "Sherman anti-trust" act of 1890.

The number of receiverships resulting from dissensions, disputes, and

tions, current fifty years ago, to the relatively simple and orderly procedure of the present time.

In the earlier years, roughly, before the panic of 1873, corporate mortgages were construed literally. In case of a default in bond interest the trustee of the mortgage might acquire possession and management of the railway property, as the strict construction of the mortgage instrument permitted,[13] or a receiver might

intercorporate intrigues are legion. It was alleged that the Cincinnati and Eastern Railway went into the hands of receivers as part of the consummation of a plan to secure the road for less than its value.—*Ry. Age,* vol. VIII, p. 596. See also *F. L. T. Co.* v. *N. Y. and Nor. Ry. Co.,* 150 N. Y. 410 (1896). Some stockholders of the Ohio and Mississippi Railroad declared that its collapse in 1876 and receivership, was part of a concerted plan on the part of the Baltimore and Ohio Railroad to secure control.—*Chicago Railway Review,* vol. 14, p. 29; *Commercial and Financial Chronicle,* vol. 22, p. 526; vol. 16, p. 392. Probably the real cause was the excessive and unwarranted cost of building the Louisville branch. Receivers were appointed for the Cincinnati, New Orleans and Pacific Railway in 1893 in order to protect the road from liability for stock fraudulently issued by a former secretary.—J. H. Hollander, *The Cincinnati Southern,* Johns Hopkins University Studies, vol. 12 (1894), p. 1. In 1904 the Eastern Ohio Traction Company went into the hands of receivers because of the fear of damage suits resulting from a wreck on the Chagrin Falls branch. Receivers have been appointed in several cases because of controversies over leases as in the case of the Eastern Railroad of New Hampshire in 1877, and the Denver and Rio Grande in 1879. Instances also exist where a receiver has been appointed to settle controversies existing between opposing interests.

Swain gives instructive instances among early receiverships of exceptions to the rule that failure is the universal condition of receivership. The Cleveland, Delphos and Saint Louis Railroad was placed in the hands of receivers in 1884 and the Tennessee Central in 1895 in order to complete construction. The directors sought receivership for the Hutchinson and Southern in 1893 to transfer control from a county to a federal court.—Swain, *Econ. Aspects,* etc., pp. 90, 94.

In recent corporate history the Kansas Natural Gas Company was thrown into the hands of federal court receivers in 1912 to protect the company from what was regarded as the unlawful demands by state and municipal authorities, the federal court being considered able to prevent the sale of gas at less than cost. In 1911 the La Crosse Water Power Company was placed in receivers' hands to protect the company from damage suits caused by inability of the company to deliver current contracted for, on account of low water and the breaking of dykes.

[13] On default the bondholder or his trustee awaited the period of grace, from thirty days to six months or even longer, and then began a foreclosure suit. In the absence of a receiver, the trustee of the bonds would assume the management of the railway. Notable case, Hartford, Providence and Fishkill Railroad.—*Chronicle,* vol. 22, p. 304. In rare instances, this action has actually been preferred by the court to the appointment of a receiver on the ground

be appointed at the instance of an antagonistic creditor.[14] The details of the procedure were distinctly matters of accident; the only certain thing being a variety of suits and countersuits all based on the desire of some faction to gain a temporary advantage through legal process.

The first period ended, and what we might call the second period of railroad receivership procedure began, with the failure of the Wabash Railway in 1884.[15] This important failure and the resulting reorganization was epoch-making in many respects,[16] but in none more than in the procedure by which it passed into the hands of the court. It was well known at the time that the Wabash system was unstable financially, but there had been no specific failure to meet any of its obligations. Yet, just before the in-

that less harm would be done to all the parties concerned. (*Tysen* v. *Wabash R. R.*, 8 Biss. 247.) But, owing to the variety of mortgages and the divergence of interests, this mode of procedure was cumbersome and prolific of disputes. Furthermore, with the growing consciousness that railroads were public enterprises, the courts were at first reluctant and later refused to extend to the mortgage trustees the full power the letter of their mortgage instruments implied, so that the trustees found their management hampered. For brief discussions of trustee management and the difficulties involved, see C. Barrett, "Dangers to Bondholders," etc., *Ry. Gaz.*, vol. 11 (1879), p. 385; J. F. Crowell, "Railway Receiverships in the United States," *Yale Rev.*, vol. 7 (1898), p. 327; Cleveland and Powell, *Railroad Finance* (1912), p. 230; W. Z. Ripley, *Railroads: Finance and Organization* (1915), p. 384.

14 In these early railroad receiverships, there was invariably an actual, not merely fictitious, opposition between the parties praying for the appointment of a receiver and the answer by the railroad's attorneys. The action was then, as now, usually initiated by a creditor's bill, claiming that the means for satisfying the creditor's claim was in jeopardy. This action by a creditor might or might not be a part of a contemporaneous action by a mortgage trustee seeking to assume the control and operation of the railway property. At all events, an officer of the corporation ordinarily appeared in honest opposition to the proceedings, and, as a result of the evidence presented by both sides of the controversy, the court obtained some inkling of the truth.

15 Crowell believes that the modern doctrine of railway receivership proceedings—in which the railroad itself may be an active or passive participant in placing itself under the administration of the court—"received its earliest formulation in the South." He cites as a leading case *Meyer* v. *Johnston*, 53 Ala. 264 (1875). This case contains an elaborate discussion of the rights of a court of equity in appointing seniors at the request of stockholders. See also 18 Grattan 819. Unquestionably the principle had been tacitly admitted in certain courts before its explicit acknowledgment in the Wabash case. See also L. A. Jones, "Receivers of Railways," *Southern Law Review*, vol. 4 (1878), p. 18.

16 See outline of this reorganization in previous article of this series, Am. Econ. Rev., vol. 8 (Dec., 1918), pp. 785-787.

evitable default on one of its thirty-odd mortgages, the officials of the road appeared before the federal court, and asked, on the petition of the road itself, that receivers be appointed. "If the lines," the petition reads, "of the road are broken up and the fragments thereof placed in the hands of various receivers, and the rolling stock, materials and supplies seized and scattered abroad, the result would be irreparable injury and damage to all persons having any interest in said line of road." The petition was granted. A corporation had placed itself in the hands of receivers. The action was heralded by all students of law as revolutionary and establishing a new interpretation of the theory of railroad receiverships. Yet the action of the federal judge was fully sustained by the United States Supreme Court.[17] Occurring

[17] *Wabash, St. Louis and Pacific Ry. Co.* v. *Central Trust Co.*, 22 Fed. 138 (1884); *Quincy, Miss. and Pac. R. R.* v. *Humphreys*, 145 U. S. 82 (1892); *St. Joseph and St. Louis R. R.* v. *Humphreys* 145 U. S. 105 (1892).

At that time the whole Wabash system consisted of over fifty subsidiary parts; it extended into six states. The federal justice who made the revolutionary decision saw fit later to defend his action as follows: "It was an application by the corporation itself, concerning which a great deal of comment has been made elsewhere . . . I hesitated. I found that Judge Shipman, a very learned and able judge, had gone over *in extenso* that class of thought. After further consideration with respect thereto, I reached the conclusion that his views were correct, to wit: Here is a vast system, extending through many states and many judicial districts. A default, it was certain, would be made in a few days. What should be done? The interests of all concerned required that some judicial action should be had for the conservation of those interests—stockholders, bondholders, creditors at large."—29 Fed. 623 (1886).

Chief Justice Fuller himself quotes the words of one of the attorneys that the bill was "without precedent" (145 U. S. 95), yet approved the principle on the ground of public policy. "We have seen," he said, "that the theory of this bill was that an insolvent railroad corporation may, in the public interest, and for the benefit of all its various creditors, surrender its property to a court of equity, to be preserved and kept in operation until it may be disposed of according to the several private rights concerned."—*St. Joseph and St. Louis R. R. Co.* v. *Humphreys*, 145 U. S. 113 (1892).

Notwithstanding, however, the explicit approval by the United States Supreme Court the doctrine was condemned by various state courts on the previously recognized ground that the petition for the appointment of a receiver must represent an "actual controversy." Such a petition (as in the Wabash case), said the Missouri supreme court, "is simply a petition by a debtor for the appointment of a receiver to manage and carry on its business, so that its creditors cannot enforce their legal rights in the courts of the country. . . . The filing of that petition no more instituted an actual controversy between contending suitors than would the filing of the Lord's Prayer. It laid no foundation whatever for the exercise of the jurisdiction of the court

as this did, in the period just before the many railway receiverships of the nineties, it established the practice of the so-called "friendly" or consent receivership for large railway corporations; and the procedure was soon applied to local utilities[18] and later to industrials.[19] These consent receiverships are now the rule for all large corporate failures.[20] Brushing aside exceptional con-

to appoint a receiver."—*State re Merriam* v. *Ross*, 122. Mo. 435 (1894). Nevertheless, these outcries on the part of state courts have availed little, and receivership petitions, instituted directly or indirectly by large public service corporations, have been sustained by the United States Supreme Court. Recent case, *Re Metropolitan Railway Receivership*, 208 U. S. 110 (1908).

The significance of the Wabash case has warranted extended discussion. Besides the cases cited in this note: *Chronicle*, vol. 38, p. 639; "A Chapter of Wabash," *North American Review*, vol. 146 (1888), p. 178; "The Wabash Receivership Case," *Am. Law Rev.*, vol. 21 (1887), p. 141. Also comments in Cleveland and Powell, *Railroad Finance*, etc., p. 235; Ripley, *Railroads*, etc., p. 385. See also note 20 of this article concerning friendly receiverships. For recent discussion, see *Some Legal Phases*, etc., p. 85.

18 Interesting recent case, *Farm. Loan & Trust Co.* v. *Meridian Water Co.*, 139 Fed. 661 (1905).

19 *Hollis* v. *Brierfield Coal and Iron Co.*, 150 U. S. 371 (1893) and recently *Guaranty Trust Co.* v. *Inter. Steam Pump Co.*, 231 Fed. 594 (1916).

20 In the words of the late Adrian H. Joline: Apparently well established principles of law, based on economic and social expediency, "enable every company in difficulties, which can find a non-resident creditor, willing to act, to place itself in the possession of a federal court receiver whenever it pleases."—Lecture of April 4, 1910, Harvard School of Business Administration.

In many instances minority interests have sought to set aside consent receiverships on the ground of dishonest collusion. For illustration, when the Philadelphia and Reading Railroad had failed in 1893, after riotous speculation by the president, this same president was appointed one of the receivers. The junior bondholders petitioned the court saying the ("friendly") creditor "did not file his bill in good faith on his own behalf and on behalf of all other holders of bonds, but at the request and for the benefit and protection of the men who were then managers of the Philadelphia and Reading Railroad Company and the Philadelphia and Reading Coal and Iron Company, and that the suit was not being pressed with due diligence."—*Ry. Age*, vol. 18, p. 735.

One of the most barefaced admissions on the part of a railroad management of the prostitution of court procedure to private ends is afforded by a statement to the stockholders of the Eastern Ohio Traction Company (dated February 15, 1904): "the appointment of a receiver is only a friendly arrangement, intended to facilitate plans for reorganization, which when accomplished will increase earning capacity."—*Chronicle*, vol. 78, p. 768.

In one or two rare instances the "friendly" receiver appointed on the petition of the corporation itself has been interpreted more as an agent of the corporation, under the protection of the court, than as an officer of the court; ("it is but just that a receiver so appointed should be held to be the corporation's

ditions, the usual practice in the consent receiverships may be very briefly stated. The necessity or desirability of a receivership having been agreed upon by the directors (usually in a secret meeting),[21] some friendly general creditor, with a claim in excess of three thousand dollars, not residing in the same state as that

agent."—*Texas and Pacific Ry. Co.* v. *Gay,* 86 Tex. 571. This is probably not good law, as a receiver under whatever conditions appointed "derives his authority from the court and not from the parties at whose instance he is appointed. He acts in behalf of no particular interest, but guards the rights of all" (198 Fed. 728). "The utmost effect of his appointment is to put the property from that time into his custody as an officer of the court" (136 U. S. 236). Quoted, approvingly, by Chief Justice Fuller, 145 U. S. 97. And the absolute neutrality of the receiver as an agent of the court is justified by a long line of Supreme Court decisions, 14 How. 52, 14 How. 368, 17 How. 322, 136 U. S. 223, 136 U. S. 87, 149 U. S. 473, 208 U. S. 360.

The history of the whole subject of consent receiverships can be followed from a few leading cases: *Meyer* v. *Johnston,* 53 Ala. 264 (1875); *Wallace* v. *Loomis,* 97 U. S. 146 (1877); *Wabash, St. Louis & Pacific Ry. Co.* v. *Central Trust Co.,* 22 Fed. 138 (1884); *Morgan's R. R. and Steam Co.* v. *Texas Central Ry.,* 137 U. S. 171 (1890); *Quincy R. R.* v. *Humphreys,* 145 U. S. 82 (1892); *St. Joseph and St. Louis R. R.* v. *Humphreys,* 145 U. S. 113 (1892); *Hollins* v. *Brierfield C. & I. Co.,* 150 U. S. 371 (1893); *Cen. Trust Co.* v. *McGeorge,* 151 U. S. 129 (1894); *Compton* v. *Jessup,* 68 Fed. 263 (1895); *Continental Trust Co.* v. *Toledo, St. Louis & K. C. R. Co.,* 82 Fed. 642 (1897); *Chapman* v. *Atlantic Trust Co.,* 119 Fed. 257 (1902), 145 Fed. 820 (1906), 208 U. S. 360 (1908); *Dickerman* v. *Northern Trust Co.,* 176 U. S. 181 (1900); *Great Western Mining Co.* v. *Harris,* 198 U. S. 561 (1905); *Blair* v. *Chicago,* 201 U. S. 400 (1906); *Horn* v. *Pere Marquette Ry. Co.,* 151 Fed. 626 (1907); *Wabash Rd.* v. *Adelbert College,* 208 U. S. 38 (1908); *Re Metropolitan Ry. Receivership,* 208 U. S. 90 (1908).

The general subject of consent receiverships has been the subject of numerous critical articles: M. M. Cohn, "Railroad Receiverships," *Am. Law Rev.,* vol. 19 (1885), p. 400; W. H. Bartol, "The Danger of Friendly Receiverships," *Popular Science Monthly,* vol. 32 (1887), p. 236; H. Woolman, "The Bane of Friendly Receiverships," *N. Am. Rev.,* vol. 158 (1894), p. 250; H. C. Caldwell, "Railway Receiverships in Federal Courts," *Am. Law Rev.,* vol. 30, p. 161; Chamberlain, "New-fashioned Receiverships," *Harvard Law Rev.,* vol. X, p. 139; editorial, *Bradstreets,* Jan., 1894.

21 The receivers for the old New York and New England Railroad were obtained at 2 o'clock in the morning for fear that attachments would be placed on the company's property the following day.—*Chronicle,* vol. 38, p. 30.

The receivership proceedings of the Chicago, Rock Island and Pacific Railway, in April, 1915, came suddenly and as a distinct shock to the business community. The contemplated action was known apparently only to the inner circle of directors, one director going so far as to say that he had been unaware that a receivership was being considered. There had been manipulation of the price of the stock immediately before the receivership, and the price declined abruptly immediately thereafter.

in which the railroad has its main office,[22] is asked to allow his name to be used in the receivership proceedings. Accordingly the attorneys for the corporation prepare the necessary bill of complaint to which the creditor complacently signs his name. The attorneys, at the same time, prepare the corporation's answer which admits the allegations of the creditor's bill and prays for the appointment of a receiver.[23] The court grants the prayer and appoints one or more receivers. Subsequently, the trustee of the general junior mortgage brings a foreclosure bill in the court of primary jurisdiction and the same receivers are appointed as under the creditor's bill.[24] At least one receiver is one of the old operating officials of the road, familiar with routine administration,[25] whose name is suggested to the court at the time.[26] The other

22 This precaution is necessary in order to throw the corporation into the federal courts. If it is desired to have the receivership in the state courts a resident creditor is selected.

23 This is called the primary bill. Ancillary bills are filed in every judicial district in which the corporation owns property.—Early leading case, *Booth* v. *Clark,* 17 How. 322 (1854). These ancillary bills must be counterparts, in all important particulars, of the original bill—*Merch. Trust Co.* v. *Kanawha and Ohio Ry.,* 39 Fed. 337 (1889)—and further state that the court of primary jurisdiction has appointed receivers.

24 Ordinarily the receivers appointed by the court of primary jurisdiction are respected by other courts, and this court will retain its control to the end of the controversy.—High, *Receivers,* p. 73; *Muller* v. *Dows,* 94 U. S. 444 (1876). As a result of the tangle over the receiverships following the last failure of the Northern Pacific Railroad, four justices of the Supreme Court declared that the suit should be "commenced in the circuit court of the district in which the principal operating offices are situated and in which there is some material part of the railroad."—*Farmers' Loan & Trust Co.* v. *Northern Pacific Ry. Co.,* 72 Fed. 26 (1896). See Daggett, p. 298; *Some Legal Phases,* etc., pp. 90, 157.

25 The only statistical study of the relative frequency of such appointments, that has come to my attention is that of Swain. He considers approximately 150 receiverships, from 1867 to 1897. These covered the following appointments: old presidents, 80 cases; general managers, 25 cases; superintendents, 17 cases; vice-presidents, 16 cases.

26 Sterne, an astute student of railroad finance, remarked many years ago: "A railroad official, in consequence of his incapacity or misfortune, or as the victim of a vicious system . . . is appointed receiver by the courts . . . and continues to earn probably a larger salary than he did as president. . . . This evil is a monstrous one."—S. Sterne, "Recent Railroad Failures and their Lessons," *Forum,* vol. 17 (1894), p. 31.

Ripley remarked, twenty years later: "The anomaly of rehabilitation entrusted to the very same persons who had brought about the failure is difficult to defend."—*Railroads,* etc., p. 387.

In Re Metropolitan Railway Receivership, 208 U. S. 90 (1908) the Supreme

receiver is a lawyer or publicist in whom the court has explicit confidence.[27]

Practically the first important work for the receivers to perform is the determination of relative priority of various claims and obligations of the bankrupt railroad. This is a problem requiring delicate judgment.[28] The natural assumption, in accordance with the *wording* of the railroad mortgages, is that the holders of bonds issued under these mortgages have a prior lien on the assets of the bankrupt corporation under all circumstances. But the courts have not so ruled. As far back as 1859, a federal court directed that the receiver meet the debts of employees before paying the interest on bonds.[29] The court alleged the well-being of the public

Court sought to absolve the equity courts from any accusation of collusion. But the reasoning hides an obvious fact behind legal verbiage.

[27] Thus in the receivership of the Chicago, Rock Island and Pacific Railway (April, 1915) Judge Carpenter of the Federal Court appointed two receivers. One was H. U. Mudge, former president of the road and an appointee of the Reid-Moore group of speculators, who were responsible for the misfortunes of the road; and the other was J. M. Dickinson, a distinguished publicist, in whom the court had justifiable confidence. The decree provided that Mr. Dickinson should have the deciding voice in case of any difference of opinion.

[28] In the larger reorganizations of the middle nineties the floating debt was almost always in excess of $10,000,000. Thus the Atchison, Topeka and Santa Fé had at its failure in 1893 over $10,000,000 of floating debt; so also had the Northern Pacific at the time of its failure in the same year. That of the Baltimore and Ohio was over $16,000,000, which amount was augmented by some $10,000,000 before a plan of reorganization was carried through. The floating debt of the Reading at the time of its last failure was estimated at over $25,000,000. (Daggett, p. 139.) Such large amounts as these necessarily represent perplexing problems, especially as the exact status of various parts of the floating debt with respect to each other and the issues of bonds is usually difficult to determine. (In the Norfolk and Western Railroad failure in 1893 there was over $300,000 of wage claims alone remaining unpaid.)

If the debt is secured by definite physical property of a stable value like steel rails, or ties, its position is secured, and actual money must be obtained immediately to meet it even though the court feels compelled to issue receivers-certificates, which may take precedence over the bonded debt. But, aside from these claims secured by the pledge of special property, the receiver ordinarily finds a great number of unsecured debts, inherited from the previous period of storm and stress. Moreover, the roadbed and equipment are probably dilapidated, and efficient operation—even public safety—may require immediate expenditures for the mere operation of the road. In this position the receiver appeals to the court to ascertain what old debts he must pay and what new ones he may contract. The answer to this problem has afforded one of the most difficult problems in the law of American railway receivership.

[29] *American Railroad Journal*, vol. 15, pp. 475, 598 (Central Ohio, Steubensville and Indiana case).

as an excuse. Gradually, the same view was extended to other debts incurred in the actual operations of the road, on the ground that in no other way could the road render the required service to the public.

During a series of important decisions,[30] the United States Supreme Court gradually advanced to the formulation of a doctrine since known as the rule in *Fosdick* v. *Schall.*[31] This rule is based on two rather significant postulates. There is first a distinction made between the fundamental property or capital of the railroad and its current property in the form of current income; and there is also a distinction made between those current debts contracted to meet imperative operating expenses and those contracted for extraordinary expenses and improvements not absolutely necessary to maintain the road's operation. The Rule in *Fosdick* v. *Schall* permitted a court to insist that its receiver meet all his current expenses during the receivership before he should use any current income to meet the charges on capital—bond interest, rentals, and the like. It also provided that if any of the current income, in the period prior to the receivership, had been deflected from its proper and necessary use of meeting imperative operating expenses, to meet capital charges, then to that extent might the receiver give those necessary imperative operating expenses remaining unpaid a priority over the lien of mortgage bonds.

Since the rule in *Fosdick* v. *Schall* was laid down the federal and supreme courts have shown no uniformity in interpreting it.[32] One current of opinion set in toward a total extinction of the presumptive rights of mortgage bondholders, and the other toward the limitation of the priorities of current debts.[33] The whole matter

[30] 11 Wall. 459 (1870); 91 U. S. 603 (1875); 94 U. S. 798 (1876); 97 U. S. 146 (1878).

[31] *Fosdick* v. *Schall,* 99 U. S. 235, decided March, 1879. This leading case will be discussed in the immediately following notes.

[32] As one legal writer expressed it: "The decisions of the Federal Circuit Courts have reflected the uncertainty of the Supreme Court, and the fate of each claim has depended to quite an extent on the ideas of the judge who happened to be sitting in the case."—C. A. Dickson, "Rights of Material and Supply Men in Railroad Foreclosure," *Am. Law Rev.*, vol. 30 (1896), p. 529.

[33] The first tendency is shown by the Supreme Court in *Hale* v. *Frost,* 99 U. S. 389 (1879), *Burnham* v. *Bowen,* 111 U. S. 776 (1884), and *St. Louis R. R.* v. *Cleveland Ry.,* 125 U. S. 658 (1887). In the Burnham case, the acts of a receiver in paying old debts, even though there was no evidence that the corporation had deflected current income to capital charges, was confirmed. Rely-

seemed to turn on a balance between two conflicting sets of motives in the minds of the courts. On the one side are the motives of fairness to labor, small contractors, farmers who supply ties, and such creditors who may not be supposed to investigate the general credit of the railroad, but whose services and supplies must be

ing on these and similar decisions, certain of the federal courts, charged with the administration of the receiverships of the middle nineties, sought to emasculate entirely the lien of the mortgage bondholders. The extremes are probably represented by Judges Hanford and Caldwell. The former, in the litigation growing out of the Northern Pacific receivership, asserted "that he who takes a mortgage on a railroad does so with the knowledge that the railroad must be operated, and that its earnings must, so far as necessary, be absorbed in the payment of operating expenses."—*F. L. & T. Co.* v. *Nor. P. R.R. Co.,* 71 Fed. 246. Judge Caldwell, in one important opinion (*Farmers L. & T. Co.* v. *Kan. City W. and N. R.R.,* 53 Fed. 182), went so far as to give practically all current debts a priority in the capital estate of the corporation. He justified his attitude in a notable address before the Greenleaf Law Club of St. Louis (*Am. Law Rev.,* vol. 30, p. 161) on the ground that there is sometimes collusion between the stockholder-management of the railroad and its bondholders, citing the famous Memphis and Little Rock case (20 Fed. 260). This attitude is argued at length in an elaborate note by M. M. Cohn, 53 Fed. 192. Also *Ames* v. *Union Pac. Ry.,* 74 Fed. 335 (1896).

The opposite, more conservative current of judicial opinion, served to limit the scope of the rule in *Fosdick* v. *Schall.* In the Miltenberger case (called by Supreme Court Justice White "a leading case" in 197 U. S. 192), the Supreme Court stated that "the discretion (to give pre-existing debts a priority) should be exercised with very great care"—*Miltenberger* v. *Logansport Ry. Co.,* 106 U. S. 311 (1882)—and proceeded to limit specifically the priority claims. Noting, some eight years later, the extreme liberality with which certain federal court judges were wont to interpret the rule in *Fosdick* v. *Schall,* the Supreme Court said: "One holding a mortgage debt upon a railroad has the same right to demand and expect of the court respect for his vested and contracted priority as the holder of a mortgage on a farm or lot. . . . No one is bound to sell to a railroad company or to work for it, and whoever has dealings with a company whose property is mortgaged must be assumed to have dealt with it on the faith of its personal responsibility, and not in expectation of subsequently displacing the priority of its mortgage liens. . . . We emphasize this fact of the sacredness of contract liens for the reason that there seems to be growing an idea that the chancellor, in the exercise of his equitable powers, has unlimited discretion in this matter in the displacement of vested liens."—*Kneeland* v. *American Loan and Trust Co.,* 136 U. S. 97 (1890). And Chief Justice Fuller stated a little later, "We readily agree that the concession to a mortgagor company of the power through its own act to displace vested liens by unsecured claims is dangerous in the extreme."—*Quincy M. and P. R. R.* v. *Humphreys,* 145 U. S. 96 (1891). See also *Thompson* v. *Western Car Co.,* 149 U. S. 95 (1892); 71 Fed. 29 (1895).

During the time that the rule in *Fosdick* v. *Schall* was being interpreted by the courts, many magazine articles, legal notes and discussions appeared, all

furnished, regularly and liberally, in order to insure uninterrupted operation. Coupled with this is the imperative public necessity of operation, a necessity which the public character of the railroad business places ahead of the merely private property rights of stockholders and bondholders. On the other side lies the respect which the courts must extend toward contracts, especially those resting on a mortgage of specific property.[34]

In the application of the rule in *Fosdick* v. *Schall* to concrete cases, two insistent practical problems are presented: what are necessary operating expenses, and over how long a period before the receivership shall the priority order be extended. A long series of cases decided in the Supreme Court presents somewhat conflicting opinions as to what constitute necessary current operating expenses.[35] In two important decisions, the courts have

concerned with the justice and expediency of superimposing current expense debts over mortgage liens. The best unbiased treatment is C. A. Dickson, "Rights of Material and Supply Men in Railroad Foreclosures," *Am. Law. Rev.*, vol. 30, p. 520. A less comprehensive treatment with less apparent insight is L. S. Metcalfe, Jr., "Priority Over Mortgage of Debts Contracted by Railroads before Receiverships," *Cen. Law Journ.*, vol. 39 (1894), p. 241. An early statement, now of little value, is G. T. Bispham, "Rights of Material Men and Employees," *Am. Bar. Assn. Rep.*, vol. 3 (1880), p. 167, which aims to show the danger of the rule in *Fosdick* v. *Schall*, then being established. S. D. Thompson, "The Court Management of Railroads," *Am. Law Rev.*, vol. 27 (1893), p. 481, takes the same point of view in a polemic against the management of railroads by the court. There was an elaborate legal note by M. M. Cohn, covering the subject, 53 Fed. 182. Note also on the subject in *St. Louis T. Co.* v. *Riley*, 70 Fed. 32 (1895).

34 A summary of the present attitude of practicing reorganization attorneys is given by Byrne in *Some Legal Phases*, etc., p. 123.

35 The Supreme Court has specifically defined current operating debts as "debts not contracted upon the personal credit of the Company but to keep the road itself in condition to be used with reasonable safety for the transportation of persons and property, and with the expectation of the parties that it is to be met out of the current receipts of the company."—*Sou. Ry. Co.* v. *Carnegie Steel Co.*, 176 U. S. 285 (1900). Such current necessary expenses do not now include the costs of betterments, no matter how desirable.

Originally, the rule in *Fosdick* v. *Schall* (99 U. S. 235) was worded "necessary operating and managing expenses, proper equipment and useful improvements." But "useful improvements" were subsequently denied in the lower courts (1909). *Ill. T. and S. B.* v. *Doud*, 105 Fed. 123 (1900) and *Rhode Island Loc. W.* v. *C. T. Co.*, 108 Fed. 5 (1900). And in the Supreme Court—*Wood* v. *Guaranty T. Co.*, 128 U. S. 416 (1888). Even a debt for rails "imperatively required in order that the road may be safely used for transportation of persons and property" was denied priority on the ground that the quantity of rails was so large as to constitute a reconstruction of the road.—*Lackawanna*

tried to define specifically the current debts that could claim priority. These are the debts for labor, the unpaid balances for current expenses due, connecting roads,[39] and materials for such maintenance as must be "done before the road can be occupied or used," not . . . "to replace old or worn-out counterparts.[37] In other words, debts for services and materials without which the established routine operation of the road would stop.[38] The other practical question in this connection is the age of the claims. All decisions admit that if a merchandise creditor has allowed his account to remain uncollected for a considerable period, he must be presumed to be depending on the general credit of the road. The debt, no matter of what character, is therefore not entitled to any priority. But the exact period of grace has been left to the judges of the federal courts appointing the receivers, and the Supreme Court has confirmed their decisions whenever the particular facts show them to have been reasonable and just.[39] A period of six months has been explicitly approved by the Supreme Court in a comparatively recent decision[40] and has been quite generally adopted as a working principle by the federal courts of the East or Middle West.[41]

Iron and Coal Co. v. *F. L. & T. Co.,* 176 U. S. 298 (1900). The Supreme Court has even denied the priority of a debt for new ties to replace decayed ties, on the ground that the road could somehow operate with the old ties—*Gregg* v. *Metro. Trust Co.,* 197 U. S. 183 (1905). It should be noted, however, that this latter case, the Gregg case, has the force of this extreme position somewhat weakened by the dissent of three of the justices on the ground of public policy.

36 *Miltenberger* v. *Logansport Ry. Co.,* 106 U. S. 286 (1882).

37 *Clev. C. and S.* v. *Knickerbocker T. Co.,* 86 Fed. 73 (1898).

38 For more extended discussion of the preferred claims in the various cases mentioned in the three preceding notes, see particularly the Miltenberger and Gregg cases, cited above. The strict and liberal interpretations are clearly contrasted in the prevailing and dissenting opinions of the latter case. See also Macken, *Modern Law of Corporations,* 564.

39 It is impossible to state definitely any arbitrary rule. In one case the Supreme Court approved a limit of three months.—*Miltenberger* v. *Logansport Ry. Co.,* 106 U. S. 325 (1882). Justice White later called this the leading case dealing with the preference of different claimants (197 U. S. 192), while another court allowed a debt of nearly two years to have preference over bonded debt.—*Atkins* v. *Ry. Co.,* 3 Hughes C. C. 307. See also *N. P. R. R.* v. *Lamont,* 69 Fed. 23 (1895). Note on time fixed in different decisions prior to 1884, 22 Fed. 476.

40 *Gregg* v. *Metro. Trust Co.,* 197 U. S. 183 (1905).

41 See note, High, *Receivers,* p. 512, stating courts which have and have not accepted the six months' limit. The "six months rule" is accepted by eastern state courts. For example, "the usual rule is to allow prior claims for materials

Closely allied with the question of the priority of current debts is that of the right of receivers to issue receivers-certificates to take precedence over the preëxisting general creditors[42] or even the mortgage bondholders.[43] Here too the law is by no means clear. The receiver asks of the court permission to issue certificates. In this petition he must designate in considerable detail the purposes for which he wishes to use the proceeds obtained from their sale; yet the general purposes for which receivers-certificates may be issued have never been definitely defined by the courts.[44] But it may be said that the courts are willing to permit the receiver to issue his certificates without much question and to any reasonable amount, if it appears that the interest and principal can be met from the current earnings of the road, or if the bond-

and labor for the six months preceding the appointment of a receiver."—*Rutherford* v. *Penn. Mid. R.R.*, 178 Penn 42 (1896). Judge Caldwell asserted explicitly there was no six months limit.—*Far. L. & T. Co.* v. *Kan. City. Ry. Co.*, 53 Fed. 182 (1892). The Supreme Court has stated that the six months rule did justice ordinarily, but that older claims might be given priority in unusual circumstances.—*Southern Ry. Co.* v. *Carnegie Steel Co.*, 176 U. S. 285 (1900).

42 Receivers-certificates may be even given priority over the claims for current operating expenses under the rule in *Fosdick* v. *Schall.*—*Bank of Commerce* v. *Cent. Coal and C. Co.*, 115 Fed. 878 (1902).

43 The priority of the certificates, unless expressly limited by the court, reaches under any debts contracted by the road. See 13 Atl. Rep. 271; also *Ames.* v. *Union Pac. Ry.*, 74 Fed. 335 (1896). But if the receiver was appointed at the request of certain junior mortgage bondholders, he would not ordinarily be permitted to issue receivers-certificates having a lien pior to a senior mortgage. See a series of discussions in the federal courts, by no means uniform, 54 Fed. 556 (1893); 62 Fed. 771 (1894); 71 Fed. 776 (1896); 79 Fed. 196 (1897); 102 Fed. 382 (1900). The matter is by no means clear, as a liberal interpretation of the priority of operating expenses—even before the receivership—as laid down by the Supreme Court in the rule *Fosdick* v. *Schall,* and interpreted in the Illinois Midland case—*Union Trust Co.* v. *Illinois Midland R.R. Co.*, 117 U. S. 434 (1886)—would seem to give the court unlimited power in the issue of receivers-certificates. Also *Amer. Trust Co.* v. *Metro. Steamship Co.*, 183 Fed. 250 (1910); and 190 Fed. 113 (1911); *Atlantic Trust Co.* v. *Chapman,* 208 U. S. 360 (1908). In actual practice, the court tries to be precise in defining the priority of the receivers-certificates it authorizes. For references to a number of instances of liberal use of receivers-certificates, see Cleveland and Powell, *Railroad Finance,* p. 243.

44 The mere appointment of the receiver does not empower him with the court's authority to borrow on receivers-certificates. Nor does the assumption by the receiver that the court will permit him to borrow give the borrowings a priority over other forms of indebtedness. For discussions see the leading Illinois Midland case, 117 U. S. 434 (1886) and other cases cited in preceding note.

holders consent to their issue.[45] Certificates may even be issued if they infringe on the actual capital of the railroad property—even to the point of cutting under prior lien mortgages[46] provided it is necessary to obtain money for the preservation and operation of the property.[47] They may also be issued to meet the debts for labor and necessary materials during the period just prior to the receivership,[48] although such certificates may not have the same priority as those issued to pay the debts of the receivership.[49] When this liberality of issue is carried to an extreme, courts of equity may so burden a railroad with receivers-certificates that the value of the mortgage bondholder's lien is absolutely obliterated. In several recent instances, this has been exactly what has happened, and the bondholders have had nothing of real value left when the time came to discharge the receiver. It is this power of the courts of equity, supported by a series of Supreme Court decisions,[50] that jeopardizes both the spirit and the letter of rail-

45 *Rutherford* v. *Penn. Midland R.R.*, 178 Penn. 38 (1896). Pennsylvania Supreme Court permitted issue of receivers-certificates to complete line at "the request of a very large proportion of bondholders, and without prejudice to the non-assenting."

46 Leading case *Wallace* v. *Loomis*, 97 U. S. 146 (1878); *Union Trust Co.* v. *Illinois Midland R.R. Co.*, 117 U. S. 434 (1886). For comments on this doctrine see *Kneeland* v. *Am. L. & T. Co.*, 136 U. S. 89 (1889).

47 On November 2, 1917, the bondholders' committee of the Gulf, Florida and Alabama Railway urged the depositing bondholders to accept a rather drastic reorganization plan which revealed an interesting case of the gradual emasculation of the bondholders' lien by a receiver. It appeared that $500,000 of receivers-certificates had been given by the court a lien ahead of $4,000,000 first mortgage bonds. "Of these only $222,500 had actually been sold and the proceeds used largely to satisfy lien claims incurred previous to the receivership, and for operating deficits." The remainder could not be sold, and there was an operating deficit of $10,000 per month; "so that a debt is piling up prior to the bonds which must be stopped at once to preserve any value in the bonds."

48 *Union Trust Co.* v. *Illinois Midland R. Co.*, 117 U. S. 434 (1886).

Apparently the court must be convinced that the materials and services are required for the actual operation—necessary operating expenses as defined in the earlier part of this article.—(*Rogers B. C. Co.* v. *Omaha K. C. E. R. R.*, 154 Fed. 629, 1907)—and would frown upon allowing the expenses of extraordinary replacements and betterments to be paid out of the proceeds of receivers-certificates. It should be noted, however, that the distinction will depend upon the theories of railroad accounting and the standards of operating efficiency adopted by the courts.

49 *B. of C.* v. *Cent. C. & C. Co.*, 115 Fed. 878.

50 *Am. B. Co.* v. *Heidelbach* 94 U. S. 798 (1876); *Wallace* v. *Loomis*, 97 U. S. 146 (1878); *Fosdick* v. *Schall*, 99 U. S. 235 (1879); *Swann* v. *Clark*, 110 U. S. 602 (1883); *Union Trust Co.* v. *Illinois Midland R.R. Co.*, 117 U. S. 434 (1885).

road mortgages. The possible exercise of this power by the federal courts weakens every public utility bond. It has been called the "extreme limit of the most extraordinary powers of a court of chancery."[51] The present writer would prefer to call it an unjustifiable emasculation of the substance of presumably inviolable contracts.

During the period that the receivers are working out these and other detailed problems of the actual management of the railroad, the various committees are at work seeking to find a substantial basis upon which to establish their plan of reorganization.[52] This requires a knowledge of at least five sets of facts. First, they must ascertain by competent auditors whether or not the published reports of the railway in the years preceding the failure were approximately true. The audit must not only verify the technical correctness of the books, but it must also determine whether or not the depreciation accounts were adequate, and if they were not—as was probably the case—to what extent the reserves were inadequate. The auditors must also ascertain whether or not all the rolling stock, claimed by the road to be in fit "usable" condition, was actually in use or in fit condition; they must check all the rentals, insurance policies and intercompany contracts to be sure that the old managers had protected the company's contractual rights. The second set of facts is supplied by special traffic accountants working independently or in collaboration with the auditors. It involves a nice determination of the relative and absolute earning capacity of the various parts of the railway system. This is important because only by classifying the subsidiary lines and leased lines according to their past earning capacity can the reorganization committees determine what parts of the system to retain in the subsequent reorganization and what parts to surrender.[53] The third set of facts is supplied by engi-

[51] Machen, *Modern Laws of Corporation,* Sec. 2049.

[52] It is becoming the custom in large railway reorganizations for the receivers not "to concern themselves with plans for reorganization." Quotation from Judge Lacombe, *Penn. Steel Co.* v. *N. Y. City Ry.,* 157 Fed. 442 (1907).

[53] In the earlier reorganizations this classification, if any were made, was more or less a matter of guess work. In the Wabash reorganization of 1887, all subsidiary parts were retained and approximately equal sacrifices enforced on all the branch line bondholders. In the Atchison reorganization of 1888, there was no attempt to separate the subsidiaries according to earning power. But in the Norfolk and Western reorganization of 1896 and in the voluntary reorganization of the Baltimore and Ohio in 1899 there was a "guesswork" attempt to apportion the sacrifices of the branch line bondholders according

neers. They consist of a careful summary of those expenditures which must be made in the immediate future and those which are to be recommended in order to increase materially the future earning capacity of the road. The committee must know these facts in order to estimate the amount of new money to be provided in the reorganization. A fourth set of facts are supplied by attorneys, acting for the reorganization committee. They have to do with the countless legal matters resulting from the general tangle: what contracts may be safely abrogated and what contracts must be fulfilled even at temporary losses, the amounts required to settle with parties holding contingent claims in order to forestall troublesome delays, the probable outcome of pending suits and the approximate expenses of the receivership and reorganization. A fifth set of facts the reorganization committees must supply themselves, and since there are among their number distinguished bankers they require no independent expert advice. These facts cover the general probability for the successful negotiation and sale of the securities of the reorganized road. The committee must assess accurately the probable effect of their reorganization plan on the market values of old and new securities, the limit of sacrifice stockholders will make without surrendering their interests, the relative marketability of long and short-term bonds, underwriting commissions and similar financial matters. Out of the shreds of these, and perhaps countless other facts, the reorganization committee must weave the pattern of its reorganization plan.

In all this work of preparation of the final reorganization plan, the receivers of the road are not considered.[54] But they report

to the probable relative earnings of the branches. In both the St. Louis and San Francisco, and Missouri Pacific reorganizations in 1916 and 1917 efforts were made by the general reorganization committees to determine the actual earning capacity of the subsidiary and branch lines and to apportion the sacrifices accordingly. The committees reached their findings with the help of elaborate reports by engineers, accountants and traffic experts.

During the receivership of the Bay State Street Railway in 1918, accountants classified the unprofitable branch lines as: (1) Those which would pay, provided there was a reasonable increase in fare; (2) those which would pay provided there was a reasonable increase of fare and substantial subsidies from the local towns; (3) those which would not pay under any reasonable conditions.

[54] Meade, writing in 1901, after the railroad reorganizations of the nineties, states: "The receivers or the directors may themselves formulate a plan of reorganization, or they may appoint a committee to formulate such a plan,

continually to the court the results of their administration of the railroad property. From these reports the reorganization committees can form estimates of the current earning capacity of the road. They can also judge when the time is ripe to bring forth their reorganization plan. Formerly plans were propounded by one committee after another, beginning almost as soon as the rumors of the railroad's disaster.[55] But now it is the custom for the reorganization committees to wait until they have gathered a complement of information and until the earning capacity of the road, under the receivership, has been fully tested. During this time, the various committees adjust their differences on the basis of actual facts, so that finally, when the plan is announced, it will have received the acknowledged support of all the committees representing the conflicting interests.

In contrast to the reorganizations before 1900, it may therefore be said that the contemporary practice is to lengthen out the period of preliminary investigation and adjustment, during which time no reorganization plan is published, and, so far as possible, to shorten the period of public discussion over the plan through a preliminary agreement on the part of all the influential interests to support the final plan as soon as it is published. Practically all the recent reorganizations have run along smoothly in an orderly manner to outward appearances. The Chicago, Rock Island and Pacific, the St. Louis and San Francisco, the Pere Marquette —all of them reorganizations involving a multitude of confiicting interests—were consummated without apparent external friction once a definite and final plan had been agreed to secretly by the various committees representing important securities.

To secure this harmony of interests, working for the success of a common plan, is the most important and the most difficult step

to which they invite the assent of the security holders."—E. S. Meade, "The Reorganization of Railroads," *Am. Acad.*, vol 210 (1901), p. 210. This assertion has now little significance, even if it had twenty years ago. The tendency is for the receivers to concern themselves but little with the preparation of the plan, as courts are insisting that their receivers remain absolutely neutral in all questions likely to cause controversy among the various security holders.

55 For example, there were no less than seventeen separate plans advanced in connection with the three reorganizations of the Philadelphia and Reading Railroad reorganization of 1882-6 plans; reorganization of 1886-7 plans; reorganization of 1895-6 plans. An illuminating survey of the almost hopeless confusion of conflicting committees and conflicting plans in an old reorganization is given in Daggett's two chapters covering the three reorganizations of the Reading.—*Railroad Reorganizations.*

in the reorganization procedure. All, except perhaps the senior bondholders, must make some sacrifices. But the determining voice lies usually with the committee representing those securities—usually the junior mortgage bonds or debentures—of which some sacrifice is required, but which is, nevertheless, in a relatively secure position as compared with the holders of the floating debt and the stocks. In other words, the plan is likely to be determined by the faction making the least sacrifice.

Out of the conflict of opinions and interests, a plan of reorganization is finally evolved. Before the receiver surrenders the property, or even before the foreclosure sale,[56] this plan is published with the recommendation of all the committees that it be accepted by the various groups of security holders. The latter are asked to become parties to the "reorganization agreement," which is the formal legal document that invariably accompanies "the plan."[57] By so doing, they acquiesce to the terms of the

[56] It is inexpedient for the members of the committee to take steps to secure the reorganization until after the plan has been announced, as no such action is usually provided for in the original deposit agreement, and an assumption of authority would be interpreted by the security holders, and even by the courts, as evidence of coercion. In one noted case the deposit agreement under which the reorganization committee acted provided that the committee could buy the railway property after it had announced a plan of reorganization. It bought the property before the announcement. The court decided this was a breach of contract, notwithstanding the very general powers granted the committee.—*Industrial,* etc. v. *Tod,* 180 N. Y. 215 (1905). In order to forestall obstructionists, Cravath advises that a foreclosure decree be obtained before the announcement of the plan; and permission so to do must be included in the original deposit agreements. On the other hand, any such procedure prevents any voluntary settlement among the security holders on the basis of an eminently fair and advantageous plan—as in the Baltimore and Ohio reorganization of 1899. There was one notable case, the Texas and Pacific reorganization of 1887, in which a voluntary adjustment with all the security holders was made after the foreclosure sale, so that the sale was never confirmed.

It is, however, necessary to note, in passing, in view of the Tod case above mentioned, that the reorganization committees must not overstep any of the authorities or limitations and restrictions specifically imposed upon them by the deposit agreements under which they are acting. See also *United Water Works Co.* v. *Omaha Water Co.,* 164 N. Y. 41 (1900).

[57] Care should be taken to distinguish between the "reorganization plan" and the "reorganization agreement." The former is the short, comprehensive statement of the financial side of the reorganization; it is an easily understood document, free from legal verbiage and intended for wide distribution. The "reorganization agreement" is an elaborate legal document. It covers the details of the "plan," together with a full and presumably exhaustive statement of the powers and limitations of the committee or committees which will carry

reorganization, and on paying their assessment, if any is called for, receive their allotted securities in the new corporation. Those who do not care to accept the terms of the reorganization are allowed to withdraw the securities originally deposited,[58] usually on the payment of a small fee to cover the expenses of the committee. If, as is probably the case, a very large proportion of the security holders consent to the conditions, the reorganization committee declares the plan operative, and the reorganization is finished except for the legal formalities.[59]

These legal formalities are, however, often very perplexing, and depend largely on the attitude of the old security holders. If practically all the security holders accept the plan, surrendering their old stocks and bonds, then no pressure upon a recalcitrant minority need be exerted. There need be no judicial sale of the old corporation's property, and no surrender of its charter. This was what happened in the great reorganization of the Baltimore and Ohio Railroad in 1899. But a complete adjustment with all the claimants and security holders is usually impossible. Some persons will feel themselves aggrieved in any plan of reorganization, and there are always strikers—to be discussed presently—who will seek to impede the progress and try to create for themselves a nuisance value, in hopes that the reorganization managers will buy them off at some fictitious price. To carry out the obvious will of the great majority of assenting claimants and security holders, the reorganization must be forced through and the dissenting minority and obstructionists settled with in a just and open manner fully approved by the court.[60] This is accomplished by the judicial sale

out the "plan," the rights of the assenting security holders, and a detailed account of the machinery by which the reorganization will be consummated. P. D. Cravath writes an illuminating defense of the inordinate length of the modern reorganization agreement.—*Some Legal Phases*, etc., p. 176.

58 *Colonial Trust Co.* v. *Wallace*, 183 Fed. 897 (1910).

59 Ordinarily finished. By declaring the plan operative, the various contracts of security holders, syndicate subscribers, and debt claimants become binding. But, the plan may be subsequently modified—providing always that the modifications are acceptable to the contracting parties—and it may even be set aside entirely and a new plan adopted. Generally speaking, however, when the plan has been declared operative, it indicates that the main adjustments have been accomplished and only the loose ends remain unfinished. These may require considerable time, as the wheels of equity procedure move slowly, but to all outward intents and purposes the reorganization has been consummated.

60 The court, by approving of the conditions of the judicial sale, may indirectly force the dissenting minority to accept the plan of reorganization approved by the assent of an overwhelming majority. But the court cannot

of the old corporation's property through a decree of foreclosure.

In theory, at least, the foreclosure of a great railroad system is similar to that of the foreclosure of a mortgage on a house,[61] but in actual practice the courts tolerate the doctrine that the "foreclosure proceedings of mortgages covering extensive railroad properties are not necessarily conducted with the limitations that attend the foreclosure of ordinary mortgages."[62] In fact, it was recognized long ago that the court might arrange the formal steps in the foreclosure with a view to facilitating the execution of a plan of reorganization already agreed upon and, by implication, approved by the court.[63] If need be, it will even order a sale of the corporation's property before the status of different claimants is determined, on the assumption that the quicker the reorganization is carried out, the better will it be for all concerned.[64] Here, as elsewhere in this complicated subject, lies the general rule that the courts have sought to facilitate the adjustment of purely private dissensions with a view first of all to the larger questions of public policy. Judging from the words of perhaps the ablest student of reorganization, they have not abused this power.[65]

directly force a security holder to accept a plan. "It is clear that the courts cannot directly or indirectly rewrite this reorganization agreement."—*Guar. T.* v. *Inter. Steam Pump Co.,* 231 Fed. 595 (1916). This was tried in one notable case, but the United States Circuit Court of Appeals (Supreme Court Justice Brewer rendering the opinion) declared against any such use of the court's power on the ground that "there is no wide discretion vested in the chancellor which permits him to disturb contract rights—the rights of property . . . It is not for the court to assume the power to compel because it believes it wise and good business . . . Every man in this country decides questions in respect to his own property for himself."—*Merchants Loan and Trust Co.* v. *Chicago Rys. Co.,* 158 Fed. 923 (1907).

61 The trustee of one of the junior mortgages just above those underlying mortgages which are not to be disturbed in the reorganization, moves for a judicial sale of the corporate property of the railroad. This position is usually unopposed by the railroad. For details of procedure, see Byrne's essay entitled "Foreclosure of Railroad Mortgages" in *Some Legal Phases,* etc.

62 *Louisville Trust Co.* v. *Louisville, N. A. and C. Ry.,* 174 U. S. 682 (1899).

63 *Soye* v. *Cent. R.R. Co.,* 99 U. S. 334 (1878).

64 *First Nat. Bank* v. *Shedd,* 121 U. S. 74 (1886). See also *Alabama G. Co.* v. *Robinson,* 72 Fed. 708 (1896); *Guaranty Trust Co.* v. *Metro. Street Ry. Co.,* 168 Fed. 937 (1909) and 177 Fed. 925 (1910).

65 "It is a source of pride, or ought to be, to every lawyer and man of business, that as a rule our federal tribunals have so used their powers as to conserve the right of property and to bring about the greatest good to the greatest number regardless of mere technical rules."—Joline, *Lectures, Harvard School of Business Administration,* p. 83.

The next step is the "decree" of sale, according to which the court preserves the outward form of the fiction of a foreclosure sale.[66] Owing to the fact that the foreclosure of the property of a great railroad corporation requires far more capital than a single man or group of men can command, the court recognizes that there will be no competition at the foreclosure sale of the property. In order to prevent the various parties who have agreed among themselves upon a workable plan of reorganization from conspiring together to purchase the property for little, and thus defeat the just claims of other creditors who have not pooled their interests, the court ordinarily fixes a minimum or "upset" price.[67] It is the amount which the receivers must realize from the property in order that the court shall confirm the sale. It amounts, practically, to the determination by the court of the price at which the reorganization committee may acquire the property of the old corporation at a public sale, and indirectly to the conditions according to which the committee must settle with the creditors who have not consented to its plan. There is, theoretically at least, a chance that other persons may care to pay more for the property than the reorganization committee,[68] and the general creditors not embraced in the committee's plan should be given—theoretically at least—an opportunity to bid in the property in satisfaction of their own liens. Moreover, the public sale preserves the form of legal procedure required in the foreclosure of a mortgage on a plot of land. But it is a foregone conclusion that the only bidder will be a representative of the reorganization committee, and his bid will represent a few dollars more than the court's upset price.[69] Accordingly, in recent practice, many courts,[70] to save the expense and notoriety connected with a public sale, authorize the receivers to give notice that they propose to

66 For details, see *Some Legal Phases*, etc., p. 139.

67 Cravath, *ibid.*, p. 202.

68 Very seldom indeed is this chance realized. Cleveland and Powell cite the interesting example of the Cape Fear and Yadkin Railroad, which was bid in by the Atlantic Coast Line interests in opposition to the plan of the reorganization committee acting for the Seaboard Air Line Railway.—*Chronicle*, vol. 67, p. 1355.

69 As very succinctly stated by Byrne: "The railroad company is an empty shell; its bondholders, creditors and stockholders are going to be the purchasers and to be, with such people as agree with them to put fresh money into the property, the bondholders and stockholders of the new company which is to own the road after foreclosure sale."—*Some Legal Phases*, etc., p. 142.

70 Particularly those of New Jersey.

sell at private sale the property of the corporation to the reorganization committee in accordance with their preärranged plan. If any one objects, or can guarantee that a larger sum shall be obtained at a public offering, the court will authorize it. Ordinarily no one objects, and the plan is carried out at a distinct saving of expense.

If no upset price is fixed, or if it is very high, the bid obtained by the receiver may be less than what the court deems just. A second, or even third, sale may be ordered in the hope of obtaining more. Sooner or later, the sale is confirmed by the court and the property comes into the possession of the new owner; and, automatically, the administration of the receiver ceases.[71]

The most difficult problem remaining to the reorganization committee after the sale is that of the final adjustment of conflicting interests. In case all the bonds are of one class, are all deposited with the reorganization committee, and there exist no other creditors, the transition from control by the receivers to that of the new corporation occurs without a possibility of friction. But such simplicity is seldom present. There are always claims to be adjusted. If the upset price exceeds the face value of one or more issues of underlying bonds, these bonds are not affected; in the vocabulary of finance they are "undisturbed." If the upset price does not equal the face value of a bond issue some adjustment is necessary with those of the bondholders who have not consented to enter the reorganization, and some kind of settlement must also be made with other creditors who refuse to consent to the plan.

These active and latent objectors are called "strikers." They

[71] The only exhaustive study made of the relative lengths of receivership is that of a table compiled by Swain, published in 1898. Using this table, with certain interpolations and adjustments, it may be said that of the 610 railroad receiverships established prior to January 1, 1894, 110, or 18 per cent, lasted less than one year; 147, or 24 per cent, between one and two years; 115, or 19 per cent, between two and three years; 85, or 14 per cent, between three and four years; and the remainder, 153, or 25 per cent of the whole, lasted more than four years. Altogether, the average duration was two years, ten months.

The present writer is of the opinion, although he has compiled no statistics to prove it, that the length of railroad receivership has increased of late years. Prior to 1890 so many small roads passed into the hands of receivers, whose affairs could be easily adjusted, that the average period was less. Recently, however, owing to railroad consolidation, every receivership represents an intricate problem which requires a comparatively long time to solve. Moreover, the standards of efficiency are much higher than before 1893, and a court is reluctant to loosen its grasp on a railroad property until it is assured that permanently good service can be rendered the public.

are of two groups. There are the general creditors of the corporation, who have furnished it with labor and material before the failure and who, being relatively few in number, have neither organized nor otherwise intervened in the proceedings. They cannot be neglected, and provision is made that their claims may be paid entirely or partially out of the money subscribed at the time of the reorganization. In case they are not satisfied with the adjustment accorded them, one or more may begin legal proceedings to set aside the foreclosure sale or otherwise hinder the course of the reorganization. The legal standing of these general creditors is by no means clearly defined, but the leading Kansas City Southern case seems to countenance the theory that they may be ignored if the railroad property is worth less than the mortgage debt, but must be included in the reorganization if the property is worth more.[72]

The other class of strikers are the security holders who object

[72] In one notable case a general creditor was able, through a noteworthy decision of the Supreme Court to annul the work of the reorganization committee merely because an agreement had been reached—as is always the case—between the stockholders and the bondholders. The court seemed to assume that such an agreement looking toward the foreclosure of the corporate property by the stockholders and bondholders, no matter under what conditions, was likely to work harm to the excluded general creditor, because he is ordinarily not strong enough to defend himself against the combination of security holders. This was the famous Monon case.—*Louisville Trust Company* v. *Louisville, New Albany and Chicago Ry. Co.,* 174 U. S. 674 (1899). It has latterly been strengthened by the now equally famous Northern Pacific or Boyd case, in which the court allowed an unsettled judgment against the old Northern Pacific Railroad to be levied against the new, reorganized Northern Pacific Railway, on the ground that the reorganization plan made no provision for the unsecured creditors, although it permitted the old stockholders to retain an interest in the new railway company by the exchange of old shares for new.—*Nor. Pac. Rd. Co.* v. *Boyd,* 228 U. S. 482 (1913). "Any device," said the prevailing opinion of the Supreme Court, "whether by private contract or judicial sale under consent decree, whereby the stockholders were preferred before the creditor, was invalid" (504). For comprehensive account of the Boyd case, see Cravath, *Some Legal Phases,* etc., p. 191. On the other hand, a long series of legal decisions, based on the theory that the general creditors have the privilege of combining together and buying in the property, the same privileges possessed by other creditors, has given legal support to the machinery of reorganization and the final settlement with them on the basis of the arbitrary upset price determined by the court. For instance, in an opinion delivered by the Supreme Court soon after the Monon case, the legality of a sale of property to the reorganization committee was upheld even though the committee had promised to give the old stockholders an interest in the new corporation. The only question was this—Was the property worth more than the mortgage bonds? If it was, then the general creditor had an interest in

to the conditions of the plan or the general procedure connected with the sale of the property, or even the execution of the reorganization agreement.[73] Although not ordinarily powerful enough to reorganize the company in their own way, they are in a position to delay the reorganization by litigation. Sometimes these "strikers" have a real grievance. In the Philadelphia and Reading reorganization of 1887 the majority of a junior issue of bonds formulated a plan in opposition to that adopted, and agreed among themselves not to comply singly with the provisions of the operative plan. Ultimately the committee felt compelled to pay them the par value of their bonds.[74] There are speculators in New York who make it their business to "hold up" reorganization committees,

the equity; if it was not, then the general creditor had none. In the latter case, the mortgage bondholder could, if he chose, surrender some of his interest in the property to the stockholder—or anybody else—without defrauding the general creditor.—*Dickerman, Trustee,* v. *The Northern Trust Co.,* 176 U. S. 181 (1900). And in the rehearing of the Monon case, above referred to, this view was maintained by the federal court.—103 Fed. 110 (1900). And the theory may be regarded as generally accepted, in spite of the apparent anomalies of the Monon and Boyd decisions, that the foreclosing bondholders may do with the property as they like, provided there is no equity remaining to the general creditors from which they were fraudulently debarred.—*Kansas City Sou. Ry.* v. *Guardian Trust Co.,* 240 U. S. 166 (1916). Yet the courts very naturally scrutinize, with great care, a reorganization agreement in which the stockholders are admitted to an interest in the new company, if the old company's debts are not all paid. "Unquestionably the sale of a railroad property under foreclosure proceedings to a committee of reorganization, according to whose plan the stockholders of the mortgagor company appear to obtain some benefit in the purchasing company, is open to the closest scrutiny." —Joline, *Lectures,* p. 52. Any suggestion of fraud or coercion or apparent injustice will defeat the proceedings. "But where," in the words of the Chicago and Erie decision, "in ordinary course, foreclosure is instituted and carried out for the honest purpose only of enforcing against the property the mortgage obligation, the mere fact that shareholders of the old company may, under a purchasing arrangement, become interested in the securities of the new, will not make the foreclosure *per se* fraudulent. . . . We see no reason why the purchaser for reorganization may not include any one whom he chooses to take into the organization, and may not contemplate even an exchange of some of the new securities for outstanding shares. To the extent that the property is worth something more than the mortgages, the general creditors are interested in any subsequent distribution. But beyond that, their interest does not extend."—*Wenger* v. *Chicago and Erie Railway Company,* 114 Fed. 34 (1902).

73 See Cravath, *Some Legal Phases,* etc., p. 202 ff.

74 It should be noted, however, that the committee was anxious to effect the reorganization without foreclosure proceedings, as there were reasons to suppose that the old charter was valuable and should be preserved. Had the committee been willing to foreclose, this "settlement" would have been unnecessary.

and such is the impatience of business men, such the possible delays in litigation, and such the expenses of a prolonged receivership, that "strikers" are ordinarily bought off. This practice only aggravates the evil. One man in particular has obtained an unenviable reputation by his numerous exploits. The fact remains that, in spite of questions of ultimate justice, in a field where justice is necessarily tempered by expediency, the effort of a few to exact onerous terms from a majority by using or threatening to use the courts for purposes of delay, can hardly justify itself, whatsoever the plea.[75]

As soon as the various conflicting interests are adjusted—in the majority of cases even before final settlements are reached—the reorganization committee causes a new corporation to be formed. The same name is retained, except that railroad is changed to railway, or company to corporation.[76] In due course of time, the assets bought at the receivers' sale are transferred to the new corporation.[77] The reorganization is completed.

ARTHUR S. DEWING.

[75] The late Adrian H. Joline put the matter well when he said: "I confess that I have a most profound contempt for most of these "bona fide holders" who try to block reorganizations; usually I could name two or three men who are responsible for these blackmailing enterprises. . . . I speak of this, because I want to impress upon you that almost all the outcry against reorganization methods comes from people who are only insincere, selfish speculators, without any genuine interest in the business, hanging on the outskirts of these enterprises in the hope of picking up some fragments."—*Lectures*, p. 86.

[76] This is the commonest subterfuge. It is worked back and forth. First there was the St. Louis and San Francisco Railway. It became the Railroad, through reorganization, in 1896, and again the Railway in 1916. Infrequently there is a slight transposition in the title itself, as when the Battle Creek and Bay City Railway became the Bay City and Battle Creek Railway after a reorganization in 1889.

The Memphis and Little Rock Railroad was sold at foreclosure sale and became the Railway. This was foreclosed a second time and became the Little Rock and Memphis Railroad. It was foreclosed a third time and became the Railway.—*Am. Law Rev.*, vol. 30, p. 161; 20 Fed. 260.

[77] The strict law is that the acquiring company is in no wise liable for debts or other obligation created by the receiver while managing the corporation.—*Godfrey* v. *Ohio and M. Ry. Co.*, 116 Ind. 30 (1888); *Davis* v. *Duncan*, 19 Fed. 477 (1884); also 67 Fed. 456 (1895); 71 Fed. 636 (1895); and 83 Tex. 286 (1892). But where the receiver has improved the property and returns it to the stockholders more valuable than when he received it, the court, in confirming the restitution, may require that the corporation assume the liabilities incurred by the receiver.—*Balt. R.R. Co.* v. *Buris*, 111 Fed. 882.

THE WAR-TAX PARADOX

John Stuart Mill's well known view that war may be paid for twice, each time at the cost of wages, found its basis in the now generally discredited wage-fund analysis. So far, Mill argued, as the funds for war are derived from capital—the revenues for government use obtained not through restrictions of individual expenditure but by deductions from the capital funds devoted to the paying of wages—so far must the wages of labor suffer. These reductions in wages would, therefore, cover the entire cost of the war, were it true that the funds for the war were derived exclusively through deductions from the volume of wage-fund capital. Nor, so far, would it signify whether the funds were secured by taxes or by bond issues, whether the scrap of paper returned by the government were a receipt of acquittance or a promise of indemnity. But with bonds, when the time for retiring them should arrive, the wage earner might be, through taxes, subjected a second time to a burden equaling the entire original cost of the war—no account being made of the intermediate interest charges.

But if the war were paid for twice out of wages, when it had imposed costs only once, to whom would accrue the gains attaching to this doubled payment? On this issue Mill's analysis throws no certain light. Clearly, however, if the restriction of capital funds carried with it a proportionate volume of unemployment, the losses in wages would accrue without any correlative gain to any one. But if the laborers still remained all at work, only at diminishing wages, the losses in wages would be credited to the employers' or the investors' margins; the laborers would stand essentially as the ultimate cost bearers of the war. The investors and the employers would have made a direct contribution of funds only to the extent of their offsetting intake of gains. Indirectly, but essentially, the laborers would be, in the first stage, the indirect but none the less the real and the ultimate contributors. Later, in the process of discharging the bonds, they would make a final settlement of the profits accounts.

If, however, the direct contributors received tax receipts but no bonds, the war would merely have imposed its costs precisely where the "capacity" was lacking, and would have allowed exemption precisely where payment should have been exacted. Neither interest nor profits but only wages would have paid. But if the direct contributors were awarded bonds instead of acquit-

tances—the wage-earners turning over to capital and enterprise a fund of net gain equal in volume to whatever should be the fiscal outlays in financing the war—the situation would be summed up in one war cost and one war profit, both at the charge of labor.

But Mill's analysis pointed to the conclusion that under no credibly possible war conditions was there hope of entire escape from fiscal wrong to the laborers. On them inevitably the war process must impose extreme and unmerited and disproportionate hardships. The best that could be hoped was that the lending class would lend out of their restricted expenditures—oblivious of the fact that this would amount merely to a gratuitous philanthropy on their part; better far to lend out of their wage capital and recoup themselves at the expense of labor. And forthwith it followed that the sole significance of bonds in place of tax receipts was to subject the laborers to the further iniquity of affording a corresponding net gain to the people that were best able to pay but that had actually escaped all payment. But the faults were inherent in the inexorable opaque and impersonal sweep of the war process. Mill, so far as I am aware, never anywhere drew the necessary conclusion—the condemnation of war loans, the correlative preference for taxes. War was merely a bad business anyway.

Mill's intuitive sense of fact was, however, a securer guide than his devices of technical analysis. Despite the defects of the wage-fund doctrine as apparatus of inquiry, he arrived at certain very significant conclusions. His thesis that the laboring classes may come near to paying twice for a war that has cost only once, I take to announce not only a theoretical possibility under assumed conditions but the inevitable outcome of conditions that are both probable and actual.

It is possible, it is indeed almost inevitable, that war imposes losses greatly in excess of anything that the fiscal costs, as represented in taxes or bonds, may report or indicate. But a large degree of unemployment in war time or in any other time through the inadequacy of capital funds is not easily credible. Reductions in output are, however, possible through lack of capital—capital not in the sense of operating funds but only of equipment goods. War must cut into product in the degree that it seriously interferes with the forthcoming or the upkeep of capital goods. This loss, to be sure, is not a tax; rather is it a reduction in the ability

to bear taxes, a partial paralysis of production—product prevented rather than product absorbed. Losses of this sort, however, labor is likely to suffer along with other distributees of industry rather than to bear them exclusively. It is true that the restriction of equipment might serve to make labor the factor relatively plenty and capital goods the factor relatively scarce. In such case, then, wages would receive a diminishing fraction of a diminishing aggregate product; the capital goods, an increasing fraction of a diminishing aggregate.

But with war the facts cannot run after this sort; with great numbers of men changing from industrial to military production or to military service, it is commonly, and almost inevitably, labor rather than equipment that is becoming the relatively scarce factor. A careful distributive analysis will, therefore, not impute to labor any notable share of the war losses which accrue outside the data of fiscal reports. It is, then, by fiscal operations rather than by purely industrial disturbances that the burdens of war are prone to be shifted to laborers or even doubled to the exploitation of laborers.

For it is clear that from the point of view of society as a whole war can impose fiscal costs in only the present tense. Most of the existing body of wealth is not available for any purpose of consumption. It serves only by its contribution to present income, not as itself directly forming a part of present income. Houses, lands, industrial equipment, car lines, are not consumables in any appreciable degree. True, they may wear out and, in the process of depreciation, contribute to current civil or military consumption. The volume of consumable goods remaining over from the past is in any case not great. And most of this volume is destined to early consumption as necessary maintenance, pending the production of newly maturing items of income. No doubt the goods may be stretched somewhat in their period of service beyond their customary term of use. Something of this sort has clearly been accomplished during the recent war months. By wearing our old clothes longer, cobbling old shoes, postponing the purchase of a new overcoat, deferring the renewal of furniture or rugs or tableware, putting off the repapering, we have curtailed our demands on the present national income of goods and services. So, again, there may be cannon and powder and even war bread stored up, as with the Germans in preparation for the war that was to surprise them.

Even so, the direct contributions of accrued wealth to present war consumption are relatively meager. But the contributions of future production are more than meager; they occur not at all. War consumption has no future tense. And still there is a sense in which the burden can be shifted. The people who bear the burden now may be indemnified later at the cost of other people. Such is, in fact, the sole significance of bonds. This contract for later reimbursement finds its occasion in the necessity that present wars provide themselves with present goods and services; only so far can there be present guns or ammunition for battle, or food, or equipment for maintaining the armies. Sir Thomas Browne's pronouncement that "he had caught a great cold had he no other clothes to wear than the skin of a bear not yet killed," goes to the heart of this aspect of the war problem. The enemy cannot be done to defeat or death by future shells discharged from cannon yet to be molded and propelled by powder not yet produced. Only phantom men can wage war with phantom arms or be nourished on future bread. That which, according to the old riddle, is food for dead men and death to living men was accurately unriddled as "nothing"—an ultimate truth for the finances of war. But by borrowing abroad one nation may meet its present needs out of foreign incomes of current product, on terms of the undertaking that out of its own later income of products it will make good the loan of present products from abroad. But this is merely to redistribute the present burden, on terms of a derivative and offsetting redistribution of future incomes. The future does not provide for the war; future producers merely indemnify the present providers. The goods that now go into war will mean a later distribution of goods that will not go into war—and cannot, the war being past.

America, however, in the recent war, having no second America to borrow from, being still, even after its entrance into the war, a great lender to foreign belligerents, had to find at home its present supply of war goods and war services. In the aggregate, then, America had to do more than merely follow the rule of pay-as-you-go. But still it was possible that certain individuals out of the total citizenship should bear the burdens. The necessary transfers of purchasing power out of individual incomes over to the government account for government expenditures, might either be made voluntary, under the inducement of an offered interest-bearing contract, or be made coercive in terms of

taxes. The bond method meant merely present sacrifices out of present incomes in support of the present war on terms of a promised later indemnity out of taxes later to be collected. The tax method meant contributions without a promised indemnity.

It is clear then, that taxes and bonds, so far as they are paid by income receivers out of income receipts, are merely different ways of getting the paying done, so that war activities and war consumption may displace civil activities for civil consumption, and not at all a way of deciding whether the paying shall be done now. With taxes, the contributions are collected, the tale is told, the books closed. The loan method provides that tax payments shall be postponed, not that payment be postponed; that future taxpayers shall indemnify the lenders for their present advances; not that the future shall provide the ships, the coal, the shells, the clothing, the cannon, the food, but that the present furnishers shall in the future be reimbursed through taxes for what they have now advanced. The taxpayer of the future time will merely return to the present contributors (with the addition of interest, it is true) what present taxation would have compelled them to pay now. Taxes are merely postponed and somewhat increased. But the present does not get rid of the burden. The present taxpayer gets rid of it now, only in the sense that the present bond buyer temporarily assumes it.

But note that, at the future date of payment, no cannon will be produced, either to be worn out in war or to be turned back to the lenders or their representatives. They restrict now their present consumption or their alternative investments through turning over their funds to the government for war purchases now. A generation hence some one else must submit to a corresponding restriction of purchasing power, in order that these lenders may have correspondingly larger free resources at that time. War products and war consumption mean a current redistribution of productive power, a functional as well as a personal redistribution. A generation hence is to come another redistribution—not a redistribution of production but only a redistribution of the things produced, a personal distribution solely. The individuals that did not pay in the present, when the things of war were displacing the products of peace, must now assign to the lenders an offsetting share of *the things of peace.* The holders went without civil goods that war goods might be; the taxpayers now go without civil goods in order that the lenders

may have more civil goods. War bonds impose profound modifications upon the distributive institutions of the future time.

So far, then, the issue between bonds and taxes is merely one of equity. Do bonds in their ultimate distribution of sacrifices apportion fairly the burdens of war? The test is in what would be a proper distribution of the costs of war, if war were paid for in current rather than in postponed taxation. If, then, bonds are issued, they should finally be discharged through taxation of precisely the same class incidence as should fairly attach to present taxes. If consumption taxes during war would provide the proper incidence of burdens, the bonds may properly be retired by similar fiscal devices. If, however, the correct basis of apportionment is income, under either proportional or progressive rates, this must also be the correct principle for the taxation that later must meet the interest charges on the bonds and finally provide for their discharge.

But under this program of ultimate settlement there could be neither class pressure nor class advantage with bond issues. The equities would refer merely to the well-to-do in their relations to one another. And in the final settlement the bonds would leave the case exactly as taxes would have left it—the bonds, however, making room for inter-individual preferences with respect to earlier or later final contributions.

So far, therefore, assuming both a present and a future revenue system consistently fair in the apportionment of burdens, there would seem to be small advantage and even smaller disadvantage in the choice between bonds and taxes. But this assumption implies not merely the improbable or the incredible with regard to future tax collections, but also both the incredible and the impossible with regard to the necessary current sacrifices. No great war of even the American sort in the war that is closing, to say nothing of that of the English and the French, can be supported under a distribution of burdens ethically tolerable in time of peace. If a great war is to go on, the burden of it has to be drastically severe on the poor as well as on the rich. Whatever the fiscal forms of collection, a high rate of charge must trench upon even the relatively meager incomes. Only when the masses contribute, and contribute greatly, can the fiscal return be considerable.

Assume, for example, the pre-war level of prices; a national

income of *$40,000,000,000*; a war budget of *$15,000,000,000*, approximately two fifths of the current national income. The income tax returns for the year 1914 reported less than 400,000 incomes above $3,000. A 100 per cent income tax on all these incomes, averaged as at $3,000 without even a minimum exemption, would afford less than $1,250,000,000 of revenues. Assume the incomes to have averaged $6,000 each, without exemption—$2,400,000,000 of fiscal returns. Double the incomes as allowance for under-statement—$5,000,000,000 in all. Double the number of income receivers as allowance for evasions—$10,000,000,000. The average family income for our 23,000,000 families, as deduced from the 1916 returns, appears to have been approximately $1800, inclusive of corporate holdings and business gains. Eight hundred thousand families had incomes of upwards of $2500 exclusive of corporate and business gains. The total income of all these 800,000 families (exclusive again of corporate and business holdings averaged at $400 for each of the 27,000,000 families), was $9,750,000,000. Assume now that three fourths of all corporate and business returns accrued to these 800,000 families—$9,000,000,000. A tax then that should take 100 per cent of all these incomes, without exemption of any sort, would provide $19,000,000,000 of revenue out of an estimated total national income of $50,000,000,000. Allowing a $2,000 exemption, the total remaining incomes for the 800,000 families would be approximately $17,000,000,000. At an average tax of 33 per cent on the taxable revenues the yield would be less than $6,000,000,000. At the actual rates as they were imposed for the year 1916 the yield of all income, corporate and profits taxes was $345,000,000; for 1917, $3,000,000,000.

Quite obviously, then, a war absorbing two fifths of the current national resources of goods and services is possible only on terms of great sacrifices imposed on the relatively meager incomes. After the rich and the well-to-do have paid all that they can, there is still an enormous payment necessary from the masses. A great war calls on all for all that they can spare. The income tax returns for 1914 showed only one $3,000 income out of seventy families. It is safe to say that to nineteen men out of twenty belongs the vague word *poor;* they are artisans, wage-earners, laborers. The support of a great war requires their grievous contributions.

Somehow, therefore, the masses of citizens must and do contribute to a great war. When the average income for civil consumption falls by two fifths, the incomes of the masses must fall. Real wages in the average must suffer relatively to product, precisely because two fifths of the national product is being diverted from civil consumption. The average income must suffer quantitatively also, unless it be true that the efficiency of civil production is so speeded up as to offset not only all the displacement of men and of capital and of civil production, but also whatever degree of rapid consumption is peculiar to the new war activities—shipping, coal, oil, munitions, ammunition, motor cars, strategic railroads, warehouses—and finally also the amount by which the consumption of food and apparel is exceptionally large. That the per capita expenditure in civil consumption declines relatively to the per capita product, rests in the mathematical necessities of the case. And that the per capita civil consumption must decline in quantitative command of goods is practically clear. Out of short crops an unusually large amount was exported. Iron was scant for civil consumption, also leather, fuel, woolens, and perhaps especially, cotton. This scarcity was indeed established by the very fact that old things were made to do duty in place of new, purchases being deferred in countless lines. This restriction of consumption, and measurably also of new construction, was the means by which ultimately the sacrifices of war were borne. There is little evidence that the per diem output of labor was appreciably increased, a very considerable body of evidence to the contrary. There has been much deliberate waste of time in a wide range of industries. And the very fact of a widespread redistribution of laborers into novel occupations involves the cancellation of much specialized skill. The new economic activities of women counted for disappointingly and shamefully small results in the total. Whatever, therefore, the technical form of payment, the income of laborers had to suffer. The actual rate approached the charge upon the most princely of American incomes; the general rise of prices has far outstripped the general rise of wages. In this lag of real wages was the laborers' contribution. There is slight prospect of such rates in future income taxes for the retirement of the war bonds as shall offset the abnormal apportionment of burdens under the present methods. More probable is it that the future taxes will be more distinctly regressive, relatively to paying capacity, than are the present methods.

Thus far, then, Mill's dissatisfaction with the distribution of the fiscal and other hardships of war appears to have been based either on the erroneous assumption that the injustices are inevitable or that they inhere in bad systems of taxation. In actual fact, however, the hardships of war have further aspects. Ordinarily there are price disturbances due to inflation. And ordinarily there is conscription. The addition of either of these factors profoundly modifies the problem.

Conscription means for the individual who is conscripted a 100 per cent levy on his assets as a going concern—his connections, his job, a practically complete appropriation of his wages, the possible requirement of his life. My conscripted colleague—whose salary was suspended, his position set at hazard, his wife sent back to teaching—returns to pay me interest on my investment in war bonds. Relatively to his, my sacrifice would have been all too little if, with twenty-fold my actual contribution, all of it had been taxes. Suppose, for example, that he and I had been adjoining farmers, bordering on a swamp and forest area out of which, on occasion, some dangerous marauding animal came to devastate our crops. Let it be arranged between us that he, as the younger and physically the more valid individual at the same time being the less well-to-do, shall devote the season to hunting down and destroying the marauder. Meanwhile his crop is to go unmade, his farm to deteriorate, his health probably to be impaired, his life possibly to be forfeited. He must have maintenance during his service in the joint interest. I am to "stake" him; but it is on the understanding that if he survives to return, he must reimburse me for my advances. If not, his children shall.

This illustration falls short of adequacy only in assuming that my colleague has acquiesced in my consistently patriotic plan of loan finance; and yet conscription was in waiting had he demurred at the obviously businesslike arrangement.

But with inflation as an integral feature of our loan finance, there arises the necessity of modifying the illustration. Assume now that, in providing the maintenance to which I bind myself, I plan to reinforce my income rather than to make any net encroachment on it, or any derivative reduction in my scale of living. The burden imposed on me by the summer activities of my expeditionary neighbor I am to make good through cutting timber off my neighbor's woodlot, so that when he gets back, or whether or not he gets back at all, I shall be none the poorer by

my maintenance of him and shall be so much the richer by my bonds—bonds that, by some necromancy or financial mystery, I hold against him instead of his holding them against me.

No? But this is precisely what inflation finance means. All the while the argument must, of course, be taken to apply solely to that share of the war revenues that is obtained through bonds. Assume also—as may be actual—that the volume of bonds is not greater than the war profits; and assume also—for clarity, since classwise it does not matter—that all the subscriptions to bonds are paid for out of war profits. The causes of the inflation, as it actually occurs, and the mechanism of the process in its ordinary actual working, are best omitted from present consideration; they complicate the analysis without further essential bearing on the argument. If, then, we assume an inflation as already well under way, a situation will be presented illustrating Mill's pessimistic foreboding at its extreme limit.

Inevitably in inflation periods employers' margins widen. This means that real wages fall. They may rise in terms of money units, but the money is weazening out in terms of exchange power. The currency unit is getting cheap because currency units are getting plenty. Money wages are derivative from the prices of products. When prices rise money wages will therefore shortly set toward rise as the result of employers' competitions. But costs lag behind prices, wages among the rest. This lag in money costs is the explanation of the increasing margins of money profits. Profits are increasing at the expense of wages. When prices are rising, employers compete against one another in order to get the advantage of these widening margins of gain that the selling prices offer. This competition pushes money wages up. With time enough, if general prices stop rising, this competitive bidding up of money wages will finally cancel exceptional margins; wages will catch up with prices and profits.

But during this period of readjustment real wages suffer. In terms not of money units but of what the money units will buy the wages go not up but down. This is only another way of saying that wages lag behind prices, another way of saying also that profits are more generous. It is not, to be sure, impossible that during the inflation years there may be certain wage advances that are real; but in general they are not so. If, indeed, the advances were real and general, the profits so far could not be actual. In those industries also in which, as in recent years, real wages

have been rising, it is safe to say that the profit margins have risen still faster.

These inflation-made margins of war years are not accurately war margins so much as inflation margins. Either with or without the war the inflation would award the same general range of profits, though clearly not quite the same peculiar distribution of them. Inflation is, in truth, about as effective a method of fleecing wage-earners as of expropriating creditors.

The special function of inflation as a device of war finance is, then, clear. In one way or another in war time real wages have to suffer. There must be either falling net money wages with stable general prices, or stable or rising money wages with a more than offsetting general rise in commodity prices. The consumption of goods and services with the wage-earning masses must be restricted, else the war, with its enormous requirements in the absorption of man power and in the displacement of civil consumption, cannot go on. The per capita consumption of goods for civil consumption being less, and the producers of them fewer, as the war absorption and consumption are more, the average civil consumption has to be less. Real wages report simply the command over consumable goods, buying power. When there is a shortage of things to buy, there must be a shortage in buying power—less money income per capita or less buying power in the same number of money units, rising prices. In America nearly 4,000,000 of men have been conscripted into service abroad or into preparation in the training camps. Other millions have been withdrawn from the industries ministering to civil consumption and diverted into shipping, new supply industries, munitions and armament. It is even asserted that 18,000,000 to 20,000,000 out of our 40,000,000 of bread-winners have been engaged directly or indirectly in war production, one half the productive energies of the country—to my mind a gross exaggeration. But still the facts had to mean a greatly restricted civil consumption. The wage-earners and their dependents include the mass of any population. Unless, then, they saved in order to lend, or were taxed into low net real wages (restricted consumption), they had to be profiteered into low real wages and restricted consumption. The country had to have their restricted consumption.

They were profiteered. (Remember all the while that it is only one aspect of war finance, taken for clarity as the sole aspect, that is under present analysis.) It was in terms of increasing

profits that wages were restricted, the prices rising faster than the money wages. From the employer's viewpoint, this meant that the things he had to sell rose faster than the wages he had to pay. This increasing spread between costs and selling prices constituted profits. Viewed from the laborer's angle, this meant declining real wages. Half understanding and wholly patriotic the wage-earner submitted.

But, understanding better, he could hardly have done less. In the absence of increased charges through excises and customs, this was his way of bearing war burdens. It was his tax. Something of this sort, by this device or by another, there had to be. Only, therefore, when viewed in its relation to a total need and in comparison with the burdens that other tax-paying ability was bearing, could any issue of justice remain with reference to the stay-at-home laborers. But were other incomes subjected to their relatively due burdens? I think not. But different interpretations of the statistical facts and different readings of the precepts of justice in taxation, may leave differences of opinion possible.

But what about the profits and the taxes on them—directly as technical profits taxes or indirectly as income taxes? Precisely here is the crux of the problem, precisely here the practical significance of the *business-as-usual* plea. The profit makers were the government collectors of a contribution from labor that in this or in some other form was imperative and inevitable. The laborers were paying—as Mill had inferred, though deducing it from an untenable analysis—but were paying in terms of employers' margins, the wage lag a contribution to profits, at the same time with a reduction in real wages and a restricted spending power.

But what were the collectors doing with the collections? With good profits they could buy many bonds. Not paying taxes with their profits, buying bonds was the most patriotic thing they could do. Their preference was for receiving interest-bearing promises, rather than non-interest-bearing tax acquittances. In the main, their purchases of bonds were taken as an acceptable settlement with the fisc. Mill's prophetic foreboding that labor, having paid once for the war, must now pay a second time to those lending for the war, was in the fatal way of fulfilment. The bonds that had been purchased out of the margins contributed by labor were now a valid obligation against the laborer as taxpayer.

Only through a special and radical and incredible and almost impracticable adaptation of the future tax system to the new situation could any remedy come. As much as, during the war, the laborers had lost through war the employers had gained and invested; and now the employers would collect it again. Out of the impoverishment of the resources of my neighboring farmer I had derived the funds in support of him in his dangerous undertaking for our joint advantage; and now he was under obligation to pay me again.

But, be it again repeated, the harm was not that the real wages were low, for they had to be, if there was to be a war; not that the masses had to suffer, for there was no other way if the war was to go on; not, finally, that the laborers did not get the bonds in place of the profit makers, for future taxes must be high enough at best; but the harm was that anybody got any bonds—bonds on which someone in the future must be taxed to meet the interest charges and finally also to discharge the principal.

Nor was it by the fact that the prices were high that there was injustice, nor even by the fact that the prices which were rising faster than the wages, made possible the profits—if only it had been true that the government which had allowed the collection of the profits had absorbed them in taxes. It was in the wrong sort of settlement with the collectors, in the giving to them of bonds instead of receipts in full, that the harm lay. Not only must the laborer bear a great share of the war burden during the war, but he must face his burden of taxes after the war is finished. The one burden, the current burden, was inevitable. It should have been the sole burden. But after all, it was not a willful wrong; only tragic blundering.

Peace, then, to Mill's prophetic spirit—possibly, also, a sad sort of joy that now our bungling world of idealism and practical business has actualized his puzzling paradox. But will the socialists and the other radicals and agitators allow to the rest of us peace?

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PRICE FIXING IN A COMPETITIVE INDUSTRY: A PIONEER CASE[1]

In the field of public utility valuation and rate regulation, both precedent and literature are abundant. Such is not the case with regard to valuation and prices in the field of the ordinary "industrial" corporations. That a United States Circuit Court should have passed on the question of a fair and just maximum price for a commodity produced by competing industrial corporations is, therefore, of considerable interest; and the fact that the action was not taken by the price fixing committee or any other body exercising war powers, heightens the significance of the case for the economic student of normal industrial life. The circumstances are as follows:

In 1916 the Federal Trade Commission conducted an investigation of the news print paper manufacturing industry. As one result of that investigation, the commission was convinced of the desirability of establishing reasonable and stable prices for news print paper, and endeavored to arrange for such prices by agreement with the manufacturers. While negotiations looking toward voluntary coöperation were under way, however, the Federal Grand Jury for the Second District of New York brought indictments against several leading manufacturers, whereupon negotiations with the commission were broken off (May, 1917). What took place thereafter is not known to the writer; but on November 26, 1917, the Attorney General of the United States entered into an agreement with the manufacturers, which provided for the price fixing here to be described. It appears that by agreement several of the indicted parties entered pleas of *nolo contendere* and paid fines. According to the agreement between the Attorney General of the United States, as trustee, and certain persons and corporations engaged in the manufacture and sale of news print paper, the Federal Trade Commission was to fix the maximum prices and terms of sale of the output of the news print paper of ten companies. Such prices and terms of sale were to apply on purchases in the United States for the duration of the war and three months thereafter.

Accordingly all parties in interest were invited to lay before

[1] The writer does not intend by anything which follows to argue for price fixing, but merely to throw light on what has been and may be done *if* prices are fixed.

the commission any pertinent data, and extensive hearings were held at which a great mass of evidence was taken. Cost figures were drawn from the books of original entry, and the vouchers of accounts of the ten manufacturers were scrutinized by expert accountants. Complete appraisals of various plants were also presented. On June 18, 1918, the commission released for publication its findings concerning reasonable maximum prices as of April 1, 1918, the main item in which findings was that a price of $3.10 per hundred pounds f.o.b. mill should apply on roll news print paper in carload lots.

Unfortunately the commission in its published findings did not present a full statement of the grounds upon which its decision was based. The only points of interest to be gleaned from them are: (1) income and excess profits taxes, whether individual or corporate, were eliminated from cost; (2) the cost of a small and incomplete mill was "not allowed to control in the determination" of the prices fixed; (3) the commission endeavored to allow a just and reasonable profit "based on the value of the property employed and the circumstances surrounding the industry"; (4) the commission sought to determine a price which would be the same "as though fixed by the seller," which presumably means that it desired to arrive at a price similar to what would have prevailed under normal competitive conditions; (5) the commission's decision took account of the important distinction between valuation for sale and valuation for rate making, and explicitly rested upon the assumption that the case in hand was one in which the purpose was to fix a rate for a going concern; (6) though not explicitly stated, the commission in reasoning concerning investment based its conclusions upon an average investment necessary for an efficient mill.

The commission's findings were not satisfactory to the manufacturers of news print paper, and, as provided for in the agreement with the Attorney General, they promptly took the matter before the United States Circuit Court for the Second District for arbitration. Their case is set forth in a printed brief, which contains arguments of considerable interest:

1. Counsel for the manufacturers cites several decisions in cases involving valuation and rate making for public utility corporations. It is noteworthy, however, that these cases are cited with the idea that they should apply on valuation only, and not upon the rate of return upon investment.

2. As to cost, the chief contentions of the manufacturers appear to be: (a) that they prefer not to have their woodlands included as a part of their investments, but to charge the quantity of wood used in the manufacture of news print paper into their expense accounts; and that such charges to expense should be at the market value of wood, rather than at cost to the manufacturer; (b) they criticize the commission for basing its findings upon the costs as ascertained for the early months of 1918, without making allowances for increases in costs occurring between that period and the date when the prices were to take effect, and they contend especially for an increase of 35 per cent in the cost of wood, as that item was taken into the commission's findings; (c) they protest against basing the price upon an average cost, contending apparently that the highest cost should be taken as a basis.

3. Perhaps the chief contentions of the manufacturers concerned the investment figure. (a) In the first place, they accepted the cost of reproduction basis, and emphasized the cost of two particular mills which had been built, in part at least, since the war. The figures for these mills they supplemented by recent appraisals of the other mills concerned. (b) In the second place, they claimed a large allowance for "going value," advancing testimony of experts to the effect that "going value should be allowed, and should be determined by taking approximately 17 per cent of the value of "tangibles" (plant, equipment, etc.). (c) Finally the manufacturers made claims for a large percentage of return upon investment, their figure being from 18 to 20 per cent. Such claims it will be noted were not based upon decisions in public utility cases, nor even upon returns which the news print paper manufacturers had been getting in the past, but rather upon testimony of "experts," as to what they ought to get, and upon general reasoning concerning the risks of the industry. The figures claimed by the manufacturers for reasonable valuation per daily ton of capacity were:

News print paper plant and water power development..	$27,500
Going value	4,675
Working capital	12,000
Total	$44,175

On their part, the newspaper publishers also submitted a brief, the salient features of which were the following:

1. A news print paper manufacturing mill is not a public utility, and the principles set forth in public utility cases do not apply.

2. The costs presented by the manufacturers, and to some extent those found by the commission, included several items which should not be allowed. For example, the publishers point out that in the case of several companies the costs contained items of extraordinary expense, either not applicable to the period during which the price fixing would apply, or representing abnormal operating conditions. Thus, one company's costs included purchased paper (finished product) and others included winter handling of wood. Several of the companies included considerable items of legal expenses which applied to the defense of their interests in the suit brought by the Attorney General under the federal anti-trust laws. Again, in some cases the costs included items which apparently were excessive, being in the nature of estimates, which not unnaturally were made large enough to cover all possibilities. Such items were those for loss in "sinkage" and barking of logs, and losses in manufacture. Probably the most important contention of the newspaper publishers, however, concerned the inclusion in cost of inter-company or inter-departmental profits. All the manufacturers appear to have included stumpage charges covering the value of timber cut. In some cases the stumpage charges were made even when the company did not own the timber, but merely had certain rights to cut timber. In all cases charges were based on the market value of wood rather than on the actual cost to the company of producing the wood. This necessarily had the result that the so-called wood cost involved in manufacturing news print paper, was larger than the actual cost by the amount of the profit made by those whose sales of wood figured in the making of the market.

With regard to investment, the publishers contended that it should not be based upon war prices of the materials needed for constructing a paper mill, and that if cost of reproduction was to be taken as the basis for determining investment the costs should be as of the period immediately preceding the war. They further contended that "going value" should not be included in investment, nor did they believe that the manufacturers could really have earned 18 per cent on their investments under normal competitive conditions. For example, even on the basis claimed by the manufacturers, the International Paper Company, they stated,

would make a margin of $18 per ton, while during the past twenty years it had actually earned on the average not over $3 per ton. On the basis of the price fixed by the commission, the publishers claimed that this company would make $10, which appeared to them to be very liberal treatment.

On September 25, 1918, the United States Circuit Court for the Second District, acting as arbitrator, handed down its findings and conclusions in the matter of the selling price of news print paper and terms of contract for the sale thereof. It is deeply to be regretted that the court did not make public a more fully reasoned opinion, setting forth in greater detail the bases for their findings. Nevertheless, a careful examination of the findings reveals points of no little interest. The chief of these appear to be:

1. "The principles applied by courts of authority in regulating rates for public utilities, should be followed in this proceeding as nearly as possible." Although the closing words of this dictum might be called "weasel words," it seems that the court was influenced by the claims of the manufacturers in this matter, and tended to overlook the distinction which undoubtedly exists between the competing manufacturers of news print paper and a municipal street railway or gas plant.

2. The court decides that the capital investment is equal the "present value" of the property actually used in paper production; and that "present value" is equivalent to "fair present value, as depreciated and at pre-war prices."

3. "Going value" is allowed by the court as a part of the necessary investment, but instead of allowing the percentage claimed by the manufacturers, the court takes 10 per cent of the tangibles in determining its amount.

4. Apparently the contention of the manufacturers that stumpage be taken into cost at market value is accepted by the court.

5. The court takes an average as the basis for its decision, both as to cost and as to investment.

6. In the judgment of the court, it is not necessary that the maximum price should be sufficient to allow a profit to those companies which are operating under abnormally difficult conditions.

7. It is decided that a fair maximum return on the capital invested in a business having the hazards which characterize the news print paper manufacturing industry is 15 per cent per annum.

The result of applying the foregoing principles is that the

court makes the following finding, with regard to investment per ton of daily capacity, which it will be interesting to compare with the claims of the manufacturers:

Tangibles	$25,000
Going value (10 per cent)	2,500
Working capital	12,000
Total	$39,500

Adding an allowance of 15 per cent, which is taken to be the fair annual return, the court arrives at a price on roll news print paper in carload lots f. o. b. mill of $3.50 per hundredweight—40 cents higher than the Federal Trade Commission's price.

Thus, as is usual in arbitration, the final figure arrived at is somewhere between the contentions of the two parties in interest. The price fixed by the court is higher than that determined upon by the Federal Trade Commission, and lower than that contended for by the manufacturers. On the whole, however, the court may be said to have been impressed by the arguments of the manufacturers in questions of principle, particularly in the matter of investment; for it accepts the idea of a condemnation or sale value, takes the cost of reproduction as of the present time (depreciated), and includes going value. Also it includes the market value of stumpage in the cost of production, excepting only when the stumpage is not owned but is cut from leased lands.

Certain general conclusions and criticisms may now be reached. From the general tenor and language of the findings adopted by the court in this case, the following presumptions concerning the tendency of courts in future cases—if any arise—appear to be justified:

1. The costs of plants operating under abnormal or extraordinary conditions of inefficiency will not be considered.

2. The tendency will be to base conclusions upon the average cost of the several companies concerned.

3. There will be a tendency to charge raw materials into cost at their estimated market value, rather than at their cost of production; this will apply at least in cases in which the raw materials are in the nature of wasting assets, such as timber and ores. Along with this tendency goes the related tendency not to include the source of the raw materials (land) in the investment. These tendencies, perhaps, result from an attempt to put producers operating with different degrees of integration on the same footing.

4. The principle of an average investment required for a reasonably efficient plant appears to be firmly established.

5. It is noteworthy that, in spite of strong arguments to the contrary, the court in this case includes "going value" in investment.

6. The tendency appears to be towards taking "present value" as the basis for determining investment. This it will be observed is proceeding as though all valuation cases, even though the purpose is only rate regulation, involved condemnation or sale. The inclusion of going value in the investment is a corollary of this tendency.

7. There will be a determination of the degree of hazard in each industry, and the rate of return to be allowed on investment will vary accordingly.

8. Judicial reasoning in cases like that involved in the determination of a fair price for news print paper is not yet clarified, and shows important inconsistencies and confusion of thought.

To the writer's mind, the chief criticisms of the findings of the court in this case are: (1) no consideration is given to the idea of marginal cost; (2) no clear distinction is made between cost and value; and (3) the difference between a public utility corporation and an ordinary competitive business is not understood. These three points are worthy of further discussion.

By failing to recognize a range of costs, and to determine the marginal cost, the court has been unable to follow a clear-cut and logical program. It has arrived at a result which appears to be fairly accurate, by a wrong way. Taking improper items into its determination of investment and of cost, it has unconsciously endeavored to offset the excessive price which would have resulted, by adopting the average cost as a basis. The writer would submit that, if prices are to be fixed, the only correct principle is to ascertain the range of actual costs determined according to strictly correct economic and accounting principles; and then to determine what the marginal cost is, according to the production which it is desired to secure.

The confusion between the idea of cost and the idea of value appears both in the determination of cost and in the determination of investment. It is well illustrated by the inclusion of stumpage in cost at its market value. Obviously if the market value of logs is greater than the cost of producing the logs there is a profit included in such market value. Therefore, for a company which

produces its own logs, market value is not cost, but cost *plus profit.* It is easily conceivable that a company might show a loss on its total business if costs were secured in this way, while in reality making a handsome profit on the conversion of raw materials which it owned. If the stumpage is not taken at cost, the paper making company is considered as being in the wood selling business; but if it were to go out of the paper making business, there would be no market for its wood. Surely it is clear that a news print paper manufacturing company, regarded as a single integrated concern, should have its total investment, including woodlands owned in fee, treated as a unit; and that all items entering into the production of news print paper should be charged at cost, if the true net earnings attributable to the company's production of news print paper are to be ascertained.

Some inconsistency appears in the court's reasoning, in that it does not allow a stumpage charge when the timber is taken from leased land, and this for the reason that there has been no "actual disbursement." In this case, one cannot help asking what the fact of actual disbursement (cost) has to do with the matter, if the question is but one of market value.

The manufacturers, in their brief, supported their claims for the inclusion of the market value of their stumpage in cost by references to the case of *Doyle* vs. *Mitchell Brothers Company* (247 U.S. 179), and it may be that the court was influenced by this decision. However that may be, a close reading of the decision referred to makes it clear that it has no application, except in matters of taxation. The case of *Doyle* vs. *Mitchell* arose under the Corporation Tax act of August 6, 1909; and the problem of the court was to construe the terms of that act. The question before the court was to ascertain the taxable income arising during the period after the tax law went into effect, and the court itself stated that "the object is to distinguish capital previously existing from income taxable under the act."

The economist will be interested in detecting in this question between market value and cost the idea of "opportunity cost." The inclusion of market value in cost is clearly based upon the idea that a paper manufacturer has the opportunity of selling his stumpage. The fallacy of this reasoning, however, is apparent when it is observed that the attractiveness of the alternative is not an absolute fact, but depends upon the amount of the margin between the *market price* and cost.

In adopting the idea of "present value" as determining investment, the court tends to cut away from original investment and again falls into confusion between value and cost. Cost of reproduction is largely relied upon as a basis for determining this so-called present value; but the cost of reproduction as used is not actual cost. On the one hand the court adds an allowance for "going value" which does not represent investment at all; while on the other hand it includes "any investment by way of actual payment for power rights." The result is a hodge-podge of items which gives neither the amount of money actually put into the business by the owners nor the market value of the business.

The writer would briefly submit that the basis which should determine is the actual amount of the investment in the business, to the extent that the investment has been honestly and wisely made, and that such terms as goodwill and going value, unless actually paid for, should accordingly not be allowed. To defend this statement of the case in detail would obviously require too much space for present purposes.

Finally, the court does not fully appreciate the significance of the public utility concept. In its second finding it says: "The principles applied by courts of authority in regulating rates for public utilities, should be allowed in this proceeding as nearly as possible." In finding No. 11, however, it contends that drought and sabotage are "business accidents, which would not relieve them from the competition of more fortunate rivals in ordinary times," and accordingly excludes the costs of certain companies from consideration. It is submitted that in a business in which there are numerous competitors, each subject to the ups and downs of competition, the principles applied in the valuation of public utilities cannot be used. A public utility, by its very nature, is a monopoly (a fact which is expressed in its possession of a franchise) and furnishes a product which has a special and vital essentiality to the people of the community served. These characteristics do not apply to the manufacture of news print paper. This product does not have to be used in connection with the plant. The business has been at times highly competitive, and is not naturally monopolistic. It might even be contended that the people could get along without news print paper for a long time; and certainly a very much smaller quantity would answer all essential purposes. Each public utility concern is assumed to be so essential to the community which it serves that its existence in its

present state must be preserved, and the essence of the public utility valuation cases is the determination of such a reasonable investment and such reasonable rates thereon as will enable the company to survive under conditions reasonably satisfactory to the owners. In the case of the news print paper manufacturers, the essence of the problem should have been to have determined the actual investment in the reasonably efficient company and to have fixed such a rate of return thereon as would enable efficient companies to survive under competition and at the same time insure that inefficient companies would not survive.

In any case, it is apparent that the court has been inconsistent in applying the public utility idea only to investment and cost, while allowing prices to be fixed with regard to the hazard of the business.

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Washington, D. C.

THE FEDERAL FARM LOAN SYSTEM[1]

I

Those who were familiar with the general provisions[2] of the Federal Farm Loan act at the time of its passage were almost unanimous in the opinion that several years must elapse before the machinery authorized by that measure could materially alter the land credit system to which the American farmer and the investing public had become accustomed. Unlike the Federal Reserve act, which had been designed to bring about desirable reforms in the commercial banking system with as little disturbance to the banking institutions of the country as possible, the Federal Farm Loan act boldly set aside American traditions in the farm mortgage business and sought not only to establish a variety of entirely new land credit institutions but also to prescribe new methods in the making of farm loans that would compare favorably with European precedents. In spirit the act was revolutionary—its authors were convinced that American methods were not worth saving; and the machinery for which it provided was greatly complicated by the fact that it did not represent the ideas of any single group of reformers. One group had been strongly in favor of direct government loans, another of coöperation, and still another of private enterprise as the basis of land credit reform. The necessity of reconciling these varied interests in a single measure could hardly be expected to make for a system that would be simple, easily administered, or immediately popular.

The preliminary organization of the system required almost a year's time. The first important task to be undertaken by the newly created Federal Farm Loan Board was the apportionment of the country into twelve districts and the establishment in each district of a federal land bank. The act had provided that these districts were to be apportioned "with due regard to the farm loan needs of the country," and that no district should contain a

1 The writer is indebted to Mr. Herbert Quick of the Federal Farm Loan Board for most of the specific facts bearing on the progress of the system. Unless otherwise indicated, the statistical data in this article have been obtained from that source.

2 For a critical discussion of the provisions of this act, see article entitled "The Federal Farm Loan Act," AMERICAN ECONOMIC REVIEW, vol. VI (December, 1916), pp. 770-789.

fractional part of any state. It was the judgment of the board that the fairest and most satisfactory way of determining the farm loan needs of the country would be through actual conference with farmers, bankers, and students of agricultural conditions. Accordingly, arrangements were made for a series of public hearings. These hearings, held in forty-four states and extending over a period of about four months, did much to acquaint the farmers with the intricacies of the new legislation.

With regard to the considerations which actually governed the board in determining the size and boundaries of federal land bank districts,[3] some attention was given to the census data pertaining to the area and value of farm land, the extent of farm mortgage indebtedness, the character and value of farm products, and the proportion of rural to total population. In addition, there were important considerations as to whether the district in question was well developed agriculturally, whether it was a one-crop district, and whether the prevailing rate of interest was such that it would lead to a rapid shifting of outstanding mortgage loans from private institutions to the federal land banks. But judging from the plan of apportionment finally adopted, it is obvious that it was the board's policy to combine into one district, wherever possible, those states whose farm loan securities were not well known with states whose farm mortgage securities stood high in the investment market. For instance Arkansas, Missouri, and Illinois, were combined to form one district; Wyoming, South Dakota, Nebraska, and Iowa, to form another; Kentucky and Tennessee were merged with Ohio and Indiana; New Mexico and Oklahoma with Kansas and Colorado. This plan of delimitation, so far as it could be carried out, was intended to equalize the security of land mortgage credit throughout the twelve districts

[3] On December 27, 1916, the Secretary of the Treasury announced the selection of the following districts by numbers and the cities in which federal land banks would be established: (1) Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, New York, and New Jersey, at Springfield; (2) Pennsylvania, Maryland, Delaware, Virginia, West Virginia, and District of Columbia, at Baltimore; (3) North Carolina, South Carolina, Georgia, and Florida, at Columbia; (4) Ohio, Indiana, Kentucky, and Tennessee, at Louisville; (5) Alabama, Mississippi, and Louisiana, at New Orleans; (6) Illinois, Missouri, and Arkansas, at St. Louis; (7) Michigan, Wisconsin, Minnesota, and North Dakota, at St. Paul; (8) Iowa, Nebraska, South Dakota, and Wyoming, at Omaha; (9) Oklahoma, Kansas, Colorado, and New Mexico, at Wichita; (10) Texas, at Houston; (11) California, Nevada, Utah, and Arizona, at Berkeley; (12) Washington, Oregon, Idaho, and Montana, at Spokane.

and, in accord with the spirit of the act, to insure the complete mobility of capital seeking farm mortgage investment.

The selection of the sites for the twelve federal land banks naturally followed the delimitation of the land bank districts. In the settlement of this problem, which was aggravated by the fact that over one hundred cities had presented their claims for selection, it was felt that some preference should be shown to those cities where there was already an aroused interest in agriculture rather than to the great commercial centers. In district 1, for instance, the award was made to Springfield rather than to Boston; and in district 11 to Berkeley rather than to San Francisco. In some cases it was possible to select a city which represented the approximate geographical center of the district; in others, to make the award to cities which, by a small margin, had failed in their efforts to gain commercial recognition from the Reserve Bank Organization Committee. This was notably true in districts 2, 5, and 7. But on the whole, the claims of the great commercial and distributing centers were unfavorably regarded. St. Louis was the only city having a federal reserve bank to be chosen as the site of a federal land bank.

The organization of the land banks proceeded slowly. It was not until March 1, 1917, that the first charter was granted. Meanwhile, the board had been confronted with the task of choosing a registrar and five directors for each bank. In the selection of the directors it was inevitable that mistakes would be made, because there was no way of knowing whether men experienced in the management of other financial undertakings could adapt themselves to the work of entirely new institutions. In those districts where it was mathematically possible, the board attempted to give each state one representative on the directorate of the land bank in the hope that such representation would prove beneficial to the management. Moreover, if loans were refused in a particular state, or if a low valuation were placed upon certain kinds of land, the residents of that state would have no grounds for complaining that they had not been properly represented. It subsequently appeared that some of the directors had misconceived their duties, believing that their primary function was to serve the interests of their own state. In other cases there were personal differences which aroused a good deal of public comment. In two of the land banks there was a distinct lack of harmony in the management, and the board was obliged to make new selections.

As was expected, most of the stock of the land banks was subscribed for by the Secretary of the Treasury on behalf of the United States. While the act had provided that subscriptions should first be received from individuals, firms, corporations, and state governments, the board made no attempt to encourage such subscriptions. In fact there was little in the investment possibilities of the land bank shares that would appeal to private investors. The payment of dividends the first year was clearly out of question; in the hands of private individuals the shares carried no voting power; it seemed improbable, moreover, that dividends in excess of 6 per cent would ever be paid, because the banks were established for the express purpose of reducing interest rates to farmers; finally, the law provided for the gradual retirement at par of the original capital stock of a land bank after the subscriptions by national farm loan associations in that district had amounted to $750,000. The stock was made available to the public January 10, 1917, for a period of thirty days. The total subscription which the Secretary of the Treasury was called upon to make on behalf of the government amounted to $8,891,270.[4]

II

The land bank organization was merely the superstructure of the new system. The twelve banks were not intended to deal directly with individual farmers but with intermediary institutions. Borrowers desiring long-term loans amounting in the aggregate to at least $20,000 might organize national farm loan associations which would deal with the land bank of the district; or, if within one year after the passage of the act no such associations had been formed in a given locality and were not likely to be formed, the board might appoint banks, trust companies, mortgage companies, or savings institutions incorporated under state laws, as agents through which a land bank would make long-term loans subject to the same general conditions as if they were made through national farm loan associations. It was clearly the in-

[4] The government's share of the $750,000 capital stock of each bank was as follows:

Springfield	$739,925	St. Paul	$744,740
Baltimore	741,485	Omaha	710,670
Columbia	750,000	Wichita	744,165
Louisville	742,265	Houston	741,235
New Orleans	745,730	Berkeley	744,010
St. Louis	742,075	Spokane	744,970

tention of Congress to encourage the formation of borrowers' associations, but the way was left open to utilize, if necessary, some of the institutions already in existence.

The lending activities of the federal land banks necessarily waited upon the formation of national farm loan associations. Here again the organization process was slow. In addition to the natural difficulties that have always attended the formation of coöperative associations among farmers accustomed to a highly individualistic régime, there were technical difficulties to be overcome—difficulties growing out of the administration of a land credit system which had no American precedent. Scant attention was given by the board to ways and means of overcoming the first difficulty, except to point out the value and magic of coöperation. Inasmuch as the act had virtually proclaimed the necessity of organizing farm loan associations before loans could be granted, the board fell to the task of educating the farmer to an understanding of the proper method of organization, the advantages of long-term loans repayable by amortization, and the economy of converting old mortgages into new ones bearing a lower rate of interest. The campaign of education was conducted through the public press, popular magazines, agricultural journals, the Department of Agriculture, and the publications of the Farm Loan Bureau.

The second set of difficulties required the closest attention of the board. Owing to the indefinite character of many of the provisions in the act, and the broad discretionary powers conferred upon the board, there were numerous perplexing questions to be settled with reference to the most desirable size of an association—the number of members, the amount of loans, ana the extent of territory covered; the compensation to be allowed the secretary-treasurer and the members of the local loan committee; the charges for appraisal and the determination of title. In addition, there were questions as to what borrowers were eligible, the purposes for which loans might be made, the kind of land which might be accepted as security, and the valuation that should be placed upon certain classes of land. Among other things the board ruled that an actual farmer is one who conducts the farm and directs its entire operation, with or without hired labor, "but that he need not necessarily reside upon the farm mortgaged"; that "equipment" (one of the purposes for which loans were authorized) includes the "improvements needed in the conduct of a farm to

facilitate its operation, including teams as well as machinery, tools and the like"; that "improvements" include "anything in the form of a beneficial structure"; and that it is unnecessary for borrowers to cultivate all of the land mortgaged.[5]

One other important question had to be decided before farm loan associations could begin their operations, namely, whether the laws of the particular state relating to foreclosure, homestead exemption, the conveying and recording of land titles, etc., were such as to afford sufficient protection to the holders of first mortgages. Investigation showed that the laws of Louisiana and Texas were not wholly satisfactory.[6] In the former state the board refused to sanction loans until the state law had been amended to remove the lien of the widow's dowry upon the lands of decedents. This amendment was promptly authorized by a special session of the legislature. In Texas, the law exempting homesteads from execution and mortgage was unfavorably regarded, but it was not found necessary to refuse loans altogether. In spite of the homestead exemption the federal land bank at Houston has been able to make a fairly large volume of loans. The law still exists (December 1, 1918) and works greatly to the disadvantage of some farmers.

The first charter was granted to a national farm loan association March 27, 1917. Since that time there has been a steady increase in the number of associations formed and the volume of loans granted. The general progress of this part of the system during the first year and a half is shown in the following table:

[5] *First Annual Report of the Federal Farm Loan Board,* 1917, p. 15.

[6] In order to relieve the distress growing out of a disastrous crop season, the legislature of North Dakota passed a law January 30, 1918, authorizing counties to issue bonds and make loans to farmers for the purpose of buying cattle feed and seed wheat. Among other things it was provided that the lien of such loans should have precedence over all obligations which borrowers might subsequently incur. The effect of this law was to make it impossible for the federal land bank at St. Paul to continue the granting of loans, within the state, that would be or would remain first liens. This condition of affairs lasted for more than two months. Finally, a plan was adopted under which any farmer wishing to borrow from the federal land bank might give a surety bond protecting the bank against the making or enforcement of a lien under the "seed and feed" law. This arrangement seemed to meet the satisfaction of all parties, and the activities of the federal land bank were resumed in that state.

District	Associations chartered to Nov. 30, 1917[7]	Loans closed to Nov. 30, 1917	Associations in existence Nov. 1, 1918[7]	Loans from organization to Nov. 1, 1918		
				Appl'd for[8]	Approved	Closed
1. Springfield ..	55	$708,455	111	$9,593,194	$7,111,195	$5,482,875
2. Baltimore ..	77	1,599,900	129	9,545,672	7,591,865	5,441,950
3. Columbia ...	157	918,345	318	22,254,446	11,553,654	6,932,820
4. Louisville ...	194	1,782,300	265	19,713,829	13,962,100	8,897,900
5. New Orleans	168	1,634,335	304	23,032,448	14,312,925	10,043,615
6. St. Louis	140	1,254,470	319	15,879,095	12,947,840	9,455,077
7. St. Paul	126	4,418,100	416	33,163,700	22,950,350	19,773,300
8. Omaha	79	1,787,490	265	25,197,870	20,767,740	15,642,740
9. Wichita	344	7,390,900	381	21,644,651	17,349,500	15,017,600
10. Houston	153	1,145,345	275	26,718,019	26,366,135	12,528,379
11. Berkeley	87	1,818,400	154	13,401,306	10,558,000	8,502,000
12. Spokane	259	5,366,615	421	45,251,882	29,225,120	21,659,900
Total	1,839	$29,824,655	3,358	$265,396,112	$194,696,424	$139,378,156

[7] Does not include charters cancelled. Of these there have been sixty-nine, forty-six in the Wichita district alone.
[8] Does not include cancelled and rejected applications.

In view of the difficulties attending the formation of national farm loan associations, the system has made remarkable progress. During the month of October, 1918, loans to the amount of $7,580,736 were made to 3,075 farmers, and this represents approximately the monthly progress of the system thus far. On November 1 there were 3,358 associations in operation; 61,174 individual loans amounting in the aggregate to $139,378,156 had been made on land mortgage security. While to some this record of accomplishments may seem disappointing—when account is taken of the total amount of mortgage indebtedness in the United States, the period of time during which the system has been in operation, and the public enthusiasm which the new legislation aroused—it must be noted that the work of organizing farm loan associations has only begun, that those already in existence may be expected to add materially to the number of their members, and that in spite of numerous obstacles yet to be overcome the present rate of progress is likely to continue.

It now seems clear, however, that the act provided for more land bank districts than were needed or desirable. Ten districts would have been sufficient. Districts 1 and 2 might well have been combined as it is difficult to see how the Springfield or Balti-

more banks can be profitably operated without the continued use of government capital. Likewise, the small volume of loans applied for in the St. Louis and Berkeley districts would suggest the desirability of a smaller number of districts and a readjustment of the boundary lines. But inequalities in the apportionment of the districts were inevitable; and it is improbable that important changes will be made. For, while the act authorized the board in its discretion to readjust the boundary lines, it definitely fixed the number of land bank districts.

It is also clear that the greatest demand for farm loans under the new system comes from the West and South—the comparatively new farming sections where high interest rates have obtained. At present, the St. Paul and Spokane districts, embracing the Northwestern States, lead all others both in the number of associations formed and the volume of loans applied for. Excluding Texas, which is a district by itself, more associations have been formed in North Dakota than in any other state, and Washington is a close second. The popularity of the farm loan association in communities where interest rates have been high is further evidenced by the fact that in district 6, comprising Illinois, Missouri, and Arkansas, the demand for loans and the number of associations formed is far greater in Arkansas than in Missouri or Illinois. On November 1, 1918, the number of associations operating in these states was 132, 112, and 75 respectively.

That the number of associations from one state to another should vary directly with the rate of interest on private capital and inversely with the extent to which the coöperative spirit has been manifest is, at first glance, paradoxical. Certainly the farmers of the West are the least coöperative at heart. In the past they have shown a decided preference for dealing with institutions conducted for profit. Had it been possible for them to share in the benefits of the new legislation by borrowing from established institutions at a rate of interest almost as low as that accorded to the members of farm loan associations, it is doubtful whether many associations would have been formed. But no such alternative materialized, first because of the little use that was made of the section in the act providing for the appointment of agents. Up to November 1, 1918, only seven agents had been appointed, and all of these were in the St. Paul district. Their total loans amounted to $302,900.

Many of those who at the time of the passage of the act recog-

nized the difficulties that would attend the organization and management of farm loan associations, gave their undivided support to the measure on the ground that the section providing for the appointment of agents was, after all, the most promising feature of the new legislation; that whether or no other sources of credit materialized, land bank agents might be depended upon to fulfil the purpose for which the new system was established.

The small use which has been made of these lending agencies thus far is due to a combination of causes. In the first place, there were administrative difficulties growing out of the law itself. The borrower was required to contribute 5 per cent of the amount of his loan to the stock of a federal land bank, and the commission paid by the land bank to an agent was to be deducted from dividends on the borrower's stock. Since the largest annual commission allowed by the law to an agent was one-half per cent of the unpaid principal of a loan, and dividends are not being paid on land bank stock, it is difficult to understand how this section can be construed so as to permit of its administration. Even if the land banks were paying dividends of 8 per cent—and that seems to be beyond all range of possibility—how could the commission charge on a $1,000 loan be deducted? It is conceivable, of course, that a land bank might not be willing to pay the maximum commission, but would banks and mortgage companies serving as agents be willing to endorse the loans they make for an annual commission of less than one-half per cent? At present there is a margin of only one-half per cent between the borrower's rate of interest and the rate paid on federal farm loan bonds; and if a land bank were to pay the maximum commission charge, it would be lending the proceeds of its bond sales at a decided loss.

In view of these difficulties and of the further fact that agents may make loans only so long as the district in which they operate is inadequately served by farm loan associations, there is really no incentive for banks and mortgage companies to serve in the capacity of agents, nor can their service be anything but a source of annoyance to the administrators of the law. These defects in the act are clearly recognized by the members of the board when they "deem it unlikely that general use will be made or can be made of the section in its present form."[9]

III

Quite another set of problems confronted the board when the land banks were called upon to make loans. Chief among these

[9] *First Annual Report,* p. 24.

problems was that of keeping the banks supplied with a continuous flow of loanable funds. In providing the machinery for this purpose the act had assumed that as a bank invested its capital in mortgage loans it would pledge the mortgages as security for a bond issue, sell the bonds, and thereby maintain a continuous supply of working capital. This assumption, however, overlooked the fact that the mere mechanical process of issuing bonds involved delay, that a large portion of a bank's capital would be locked up in farm loans at a time when the mortgages were not yet available for bond issues, and that in the case of some of the land banks all of the original capital might be exhausted before bonds could possibly be issued. Moreover, it was not fully realized that these bonds would be a new type of security to American investors, and that in spite of their attractive investment qualities they might not appeal to conservative investment classes.

In order that the land banks might have the most immediate and dependable market for their bonds, the board sought the coöperation of a group of bond houses.[10] These houses agreed to associate with themselves bond dealers in every federal land bank district; to purchase 40 per cent of the bonds issued under the first agreement; and to retail them at a price of 101⅛. The rate of interest borne by the bonds was 4½ per cent. They were drawn for a term of twenty years, and might be called after the expiration of five years. Under this agreement the syndicate purchased approximately $25,000,000 of the bonds.

The establishment of an interest rate of 4½ per cent on federal farm loan bonds made it necessary that the land banks lend at not less than 5 nor more than 5½ per cent. It was known that even if loans were made at the maximum rate, the full margin of 1 per cent would not enable the land banks to meet their expenses the first year. Nevertheless the borrower's rate was fixed at 5 per cent. At the same time the board strongly advised that farmers take out their mortgage loans for a period of thirty-six years.

A good deal of hostile criticism was aroused in certain quarters[11] on account of the wide difference in the terms for which bonds and mortgages were to run. It was claimed that, inasmuch as bonds and mortgages were improperly matched, the board was leading the land banks to financial ruin, that when the bonds ma-

10 The syndicate was composed of Alexander Brown and Sons of Baltimore; Brown Brothers and Company of Philadelphia; Harris, Forbes and Company of New York; and Lee, Higginson and Company of Boston.

tured the banks would be unable to meet their obligations because of the unpaid principal on their loans. But such criticism could scarcely be made in good faith by any one familiar with the activities of foreign rural credit associations. It is no violation of sound land credit principles to make loans for one term of years and to issue bonds for another so long as the volume of outstanding bonds does not exceed the unpaid principal of the loans. Certainly in the present case there was ample justification for the board's policy. If, at the outset, it was expedient to fix a low rate of interest on loans, it was also desirable that the yearly charge for amortization be small. Otherwise it might not have seemed advantageous to borrowers in the older agricultural sections, where the yearly cost of borrowing is already low, to fall in line with the spirit of the new system and organize associations. From the point of view of the investor the short-term bond was preferable to a bond maturing in thirty-six years because of the novel character of the investment. And on the administrative side there was the hope that most of the 4½ per cent bonds might be called in before maturity and converted into 4 or 3½ per cent bonds. Finally, if the unexpected should occur, and a large number of borrowers allowed their loans to run until maturity, the unpaid portion of their principal at the end of twenty years would still be available as security for new bonds, bearing a lower rate of interest, from the proceeds of which all obligations could be promptly met.

The entrance of the United States into the European conflict greatly affected the board's policy as to interest rates on bonds and mortgages. Between the first and second Liberty Loan issues, no difficulty was experienced in marketing nearly $30,000,000 of farm loan bonds at a premium. But the absorption by the government of nearly six billion dollars of capital within a period of six months and the rapid rise in interest rates, made it evident that even with a reduction in the premium on farm loan bonds they could not be marketed either in the amount or with the promptness that the farm loan situation required. For, in addition to the consideration that the normal farm loan needs of the country must be supplied, there was the fact that war prices

[11] See especially the criticism by Myron T. Herrick in *Journal of the American Bankers Association,* vol. X (March, 1918), pp. 641-643; also of R. Ingalls, *Congressional Record,* vol. 56 (April 6, 1918), pp. 5127-5131.

had greatly stimulated the demand for farm loans, and that everywhere farmers were being urged to increase their efforts.

In the face of the nation-wide propaganda to further the production of foodstuffs, the rise in the rate of interest on highly marketable securities caused some withdrawal of private capital from the farm mortgage field. Except in those cases where motives of patriotism forbade "profiteering" in interest rates, the renewal of maturing farm loans at the old rate of interest was not an easy matter. In short, the difficulties that beset borrowers in getting accommodation from the old established institutions whether for the renewal of maturing loans or for the purpose of extending their agricultural operations, created a distinct demand for the services of the federal land banks which were in no position to furnish the funds required.

The first step taken by the board in dealing with this problem was to recommend to the several banks that the interest rate on mortgages be increased to 5½ per cent. This rate became effective December 6, 1917. The second step was to submit to Congress an amendment to the law authorizing the Secretary of the Treasury to purchase farm loan bonds at par and accrued interest to an amount not exceeding $100,000,000 in each of the fiscal years ending June 30, 1918, and June 30, 1919, to be subject to redemption or resale by the land banks at the same price. This amendment was approved January 18, 1918. Finally, in May the interest rate on farm loan bonds was increased to 5 per cent.

The necessity of calling upon the Federal Treasury to purchase "instrumentalities of the Government of the United States," was especially obnoxious to those who had been hostile toward the farm loan system from the time of its inception. But in view of the peculiar situation created by the war, there appears to have been abundant justification for this temporary expedient. Not only did it enable the land banks to continue the granting of loans to an essential war industry, but it accomplished this purpose without interfering in any way with the sale of Liberty bonds. Doubtless the public offering of tax-exempt farm loan bonds bearing high interest rates at a time when Liberty bonds were being subjected to heavier taxes, would have caused no little embarrassment to the Secretary of the Treasury.

On December 1, 1918, the total volume of federal farm loan bonds outstanding amounted to $140,500,000.[12] Under the authority granted by the amendment of January 18, the Treasury

Land bank	Bearing $4\frac{1}{2}$ per cent	Bearing 5 per cent	Total
Springfield	$1,750,000	$3,250,000	$5,000,000
Baltimore	2,750,000	2,500,000	5,250,000
Columbia	3,000,000	3,500,000	6,500,000
Louisville	4,750,000	4,250,000	9,000,000
New Orleans	5,750,000	5,000,000	10,750,000
St. Louis	4,500,000	6,500,000	11,000,000
St. Paul	14,500,000	5,750,000	20,250,000
Omaha	11,000,000	3,250,000	14,250,000
Wichita	10,750,000	3,500,000	14,250,000
Houston	7,250,000	5,750,000	13,000,000
Berkeley	5,250,000	2,750,000	8,000,000
Spokane	13,750,000	9,500,000	23,250,000
Total	$85,000,000	$55,500,000	$140,500,000

had purchased altogether $67,660,000 of the bonds, and the land banks had repurchased and sold at a substantial premium $11,-690,000 of the 5 per cent bonds dated May 1, 1918. The remainder, amounting to $55,970,000 and bearing $4\frac{1}{2}$ per cent represented the net total of the bonds purchased and held by the Secretary of the Treasury.

Another provision in the amendment of January 18 was concerned with the internal organization of the land banks. The original act provided that as soon as the subscriptions of national farm loan associations to the stock of any land bank had reached the sum of $100,000, that is, when a land bank had made loans to the amount of $2,000,000, the number of land bank directors would be increased from five to nine. Six of these, known as "local directors" were to be chosen by and be representative of national farm loan associations. It provided, moreover, that after a land bank had received stock subscriptions of $750,000 from farm loan associations, it should begin the retirement of the shares subscribed for by the government and the public by applying semi-annually 25 per cent of all sums thereafter subscribed to the retirement of the original stock.

In accordance with this second provision, the Spokane and St. Paul banks retired government stock during the month of November, 1918, to the amount of $74,583 and $52,131 respectively. During the same month the subscriptions to the stock of the

[12] The total volume of $4\frac{1}{2}$ and 5 per cent bonds outstanding in the name of each land bank was as follows:

Omaha and Wichita banks also exceeded $750,000, and these banks are therefore expected to retire a portion of their government stock in May, 1919.[13] In spite of this progress, however, none of the land banks has been organized on a permanent basis. In view of the fact that the government must for several years continue to be a majority stockholder in the banks, that the banks themselves may be employed as financial agents of the government, and that the Secretary of the Treasury was required to purchase their bonds, it was the judgment of the board that the government should name a majority of the land bank directors so long as it continued to be the majority stockholder. Accordingly, the amendment providing for the purchase of farm loan bonds by the Secretary of the Treasury also provided that the temporary organization of any federal land bank should be continued so long as any farm loan bonds were held by the Treasury, and until the subscriptions to stock by national farm loan associations equalled the amount of stock held by the government.

Thus far none of the land banks has paid dividends, but four of them, namely, Omaha, St. Paul, Wichita, and Spokane, are now accumulating surpluses and it is anticipated that their earnings will soon warrant dividend payments. The business of the other banks has been comparatively small, too small to overcome the impairment of capital which, as a matter of course, began as soon as they were organized. Handicapped by their inability to make loans through agents, they have been obliged to wait upon the formation of national farm loan associations. Moreover, their expenses have proved to be rather burdensome on account of the large number of small borrowers and the fact that the costs of appraisement and determination of title are practically the same whether a loan is large or small. While a portion of this expense has been shifted to the borrower, there remains a fixed charge upon the land banks which cannot be materially reduced so long as the average size of loans is small. With a view to increasing the net earning power of the less prosperous banks, the board has suggested to Congress that the maximum loan authorized by the act be increased from $10,000 to $25,000.[14] At the same time it calls attention to the fact that the question of dividends is relatively unimportant and that the lack of dividends on stock

[13] *Annual Report of the Secretary of the Treasury,* 1918, p. 104.
[14] *First Annual Report,* p. 24.

held by national farm loan associations is fully made up to borrowers in the form of a low interest rate on their loans.

IV

In order to protect the farm mortgage companies already in existence and to satisfy those who favored private enterprise as the proper basis of land credit reform, the act provided for the voluntary incorporation of joint stock land banks under a federal charter. The status of these banks in the new system was peculiar. While they were in no way dependent upon the formation of national farm loan associations, and were free from many of the restrictions imposed upon federal land banks, a joint stock bank could make mortgage loans in only two states contiguous to one another, and could issue bonds only up to fifteen times its capital stock and surplus. At the same time these banks were dependent upon the services of a federal land bank appraiser and the farm loan registrar, and were subject to supervision by the Federal Farm Loan Board. In providing for two distinct types of bond issuing banks, the act was in reality a combination of two distinct laws; but the section dealing with joint stock banks was carelessly framed and so involved with other sections that it was exceedingly ambiguous and, on some points, even contradictory.[15]

It was almost a year after the passage of the act before any joint stock land banks were organized. The law itself was responsible for this delay, first, because it did not meet with the approval of farm mortgage bankers, and secondly, because it was impossible for a joint stock bank to begin active operations until the federal land banks had been firmly established. In the South and West, however, a number of "rural credit associations" came into existence almost immediately after the act was passed. The representation was made that these associations would subsequently be recognized under a federal charter. Liberal fees were paid to those who sold the stock, and liberal promises were made to farmers who subscribed for the shares. Many of these concerns were clearly fraudulent and the board was obliged to intervene for the protection of the stockholders. One of the first rulings adopted by the board was that no charter would be granted to any joint stock land bank in the organization of which there had been any expense for promotion.

Although a few joint stock banks were organized almost im-

[15] See American Economic Review, vol. VI, p. 727, footnote 30.

mediately after the federal land banks were ready to begin their operations, progress thus far has been slow. Up to November 1, 1918, nine such banks had been formed, and five of these had issued bonds amounting in the aggregate to $6,875,000. The significant facts relative to the organization and operation of these banks are shown in the following table:

Name of bank[16]	Date of organization	Location of principal office	Territory	Capital	Bonds	Interest rate on bonds
						Per cent
Iowa	Apr. 24, 1917	Sioux City, Iowa	Iowa, S. Dak.	$1,125,000	$75,000	5
Virginian...	May 7, 1917	Charleston, W. Va.	Ohio, W. Va.	250,000	800,000	5
Fletcher	June 28, 1917	Indianapolis, Ind.	Ind., Ill.	250,000	1,400,000 800,000	5 4½
First	July 25, 1917	Chicago, Ill.	Ill., Iowa	375,000	3,300,000	5
Liberty	Jan. 9, 1918	Salina, Kans.	Kans., Mo.	250,000	500,000	5
Mississippi..	June 22, 1918	Memphis, Tenn.	Tenn., Miss.	250,000		
Arkansas....	June 22, 1918	Memphis, Tenn.	Tenn., Ark.	250,000		
Lincoln.....	July 12, 1918	Lincoln, Neb.	Neb., Iowa	250,000		
Bankers.....	Sept. 6, 1918	Milwaukee, Wis.	Wis., Minn.	250,000		

[16] The name as indicated must be followed in each case by "joint stock land bank" in conformity with a ruling of the board.

Another fact of significance is that only four of these banks were engaged in the business of negotiating farm mortgages prior to the date of their organization as federal corporations, and two of these, located at Memphis, are operated by the same group of mortgage bankers. Manifestly, farm mortgage companies have been reluctant to change their form of organization or the method of conducting their business—and for good cause. The larger companies have perfected an organization extending over several states. The territory in which they operate has been carefully selected, they have the goodwill of a large and dependable clientele, and with a very small amount of capital they can conduct a large and fairly profitable business. Moreover, their mortgages can be sold without recourse and they are under no obligation to limit the volume of their loans. Finally, the business of these companies has hardly been affected by the operations of the federal land banks. The activities of the farm mortgage companies have been

confined for the most part to the states that rank first in agricultural development, while the business of the federal land banks has come largely from the newer agricultural sections. Where these two systems are thrown into competition with one another, the advantages offered by the federal land banks in the form of a lower rate of interest may be offset by the fact that the farmer who borrows from a mortgage company knows in advance the approximate cost of his loan; he can repay his principal in whole or in part before the expiration of five years; and the period of time elapsing between the application for and the closing of a loan is, in most cases, exceedingly short. It could not, therefore, be expected that a large number of companies engaged in making land mortgage loans would reorganize under a federal charter.

It is not to be inferred, however, that farm mortgage bankers have been indifferent toward the new legislation merely because they have not yet felt the competition of the federal land banks. On the contrary, they have been thoroughly aroused by the steady growth in the number of farm loan associations. And, although discounting the ultimate success of these potential competitors, they are endeavoring to secure certain changes in the law in order that they might be able, should the necessity arise, to come in under the new system and compete with the federal land banks on more advantageous terms. The specific amendments which they propose were the outgrowth of a series of conferences, beginning in October, 1917, and lasting until January 5, 1918, between a special committee of the Farm Mortgage Bankers Association and the Federal Farm Loan Board. These amendments, if approved, would permit a joint stock land bank: (1) to make mortgage loans in all parts of the continental United States; (2) to issue farm loan bonds up to twenty times its capital and surplus; (3) to make loans at a maximum rate of 6½ per cent; (4) to sell mortgages without recourse when not to be used as security for bond issues; (5) to make short-time loans and single payment loans or loans payable in instalments; (6) to invest a portion of its funds in municipal bonds and other securities to be approved by the board; (7) to substitute the word "national" in place of the words "joint stock" in the corporate name; and (8) to go into voluntary liquidation. In addition, it is proposed that the provisions of the law relating to joint stock land banks be brought together into one complete section so that they may be entirely independent of the sections pertaining to federal land banks.

To the first three of these proposed amendments the board has offered no objection.[17] On the other proposed changes the board has been unwilling to express an opinion in advance of a request from Congress. It would seem only reasonable, however, that farm mortgage companies reorganized as joint stock land banks be allowed these additional privileges. In the early period of their existence, the privilege of selling mortgages without recourse, and of making loans payable in lump sum, would enable them to retain those clients who prefer the old farm mortgage methods. The power to make short-time loans and to invest in certain classes of municipal securities would insure a maximum earning power for funds that might otherwise be idle. The argument that the words "joint stock" are of foreign origin and convey no definite meaning to American investors is well taken. In proposing that the word "national" be substituted for "joint stock" in the corporate name, and that such banks be allowed to go into voluntary liquidation, the farm mortgage companies are merely asking to be put upon an equal plane with national banks. Finally, the provisions of the law dealing with joint stock banks should be brought together and rewritten, even at the risk of repetition, in order to clarify the legal status of these institutions.

If these changes in the law are approved—and a bill[18] embodying the proposed amendments is soon to be introduced in Congress—the opportunity for private enterprise in the new system will at once be greatly extended. And, unless the country is definitely committed to a policy of government loans, this opportunity should be granted. Experience has shown that private enterprise can be depended upon to mobilize capital and reduce interest rates if given the proper machinery, and that institutions conducted for profit can operate successfully in competition with state-aided ventures. It is worth noting in this connection that on November 1, 1918, the Virginian Joint Stock Land Bank, operating in Ohio and West Virginia, had issued bonds to the amount of $800,000, and that the total volume of mortgage loans made by the federal land banks in the same territory was $1,396,100. On the same date, the Fletcher Joint Stock Land Bank had issued bonds to the amount of $2,200,000 on the security of mortgage loans made in Indiana and Illinois, and in these states the loans

[17] See *First Annual Report,* p. 23.

[18] See *Bulletin of the Farm Mortgage Bankers Association,* vol. IV (July, 1918), pp. 17-25.

of federal land banks had amounted to $6,306,960. When account is taken of the prejudicial character of the law relating to private enterprise, the fact that federal land banks are much larger institutions than any of the joint stock banks yet formed, and that their interest rate to borrowers is somewhat lower, the progress of the joint stock land banks thus far is all that could be expected. If the amendments now proposed by the farm mortgage bankers are approved, it is not unlikely that joint stock land banks would conduct most of the farm mortgage business of the Middle West.

V

The purpose of the Federal Farm Loan act was clearly twofold: first, to improve the method of making loans; second, to reduce to approximate equality throughout the United States the cost of borrowing on farm mortgage security. Some of the outstanding qualitative results of this twofold program may now be noted.

It is unnecessary to point out that the system has already demonstrated the superiority of long-term loans repayable by amortization, and the advantages of mobilizing capital through the sale of bonds issued on the collective security of farm mortgages. Through the medium of federal farm loan bonds capital has been made to move from the investment centers of the country to the farm mortgage field with less expense to the borrowers than ever before. In the old agricultural states, the utilization of this machinery has not been attended with great economies, but in those sections where interest rates were formerly 8 to 10 per cent, the cost of borrowing has been materially reduced and the demand for loans greatly stimulated.

That the federal land banks have found their most promising field for operation in those states which under the old régime were not favorably regarded by the private capitalist, is shown by the fact that of the total loans they had made on November 1, 1918, 32.5 per cent had been made in the Southern States, including the South Atlantic division, where the farm mortgage indebtedness is 16.1[19] per cent of that of the entire country. In the Mountain States the corresponding figures were 12.7 and 2.8 per cent; in

[19] Estimates of the Department of Agriculture for 1915 based on the thirteenth census figures. See *Hearings before the Subcommittee of the Joint Committee on Rural Credits* (64 Cong., 1 Sess.), p. 107.

the Pacific Coast division, 12.7 and 5.6 per cent; in the West North Central States, 29.05 and 38.2 per cent; in the East North Central States, 8.4 and 26.2 per cent; and in the New England and Middle Atlantic divisions combined, 4.5 and 10.9 per cent. While the steady flow of capital[20] to the West and South should greatly stimulate agricultural progress, there is an apparent danger that in making too large a proportion of their loans in these sections, the land banks might expose themselves to those hazards which private mortgage companies have been careful to avoid.[21] To the holder of federal farm loan bonds, however, this matter is of little concern because the investment status[22] of these securities is not solely dependent on the ability of the land banks to meet their obligations.

Another device intended to reduce the cost of borrowing was the national farm loan association. Just as the rate of interest

20 It may be that in some sections the outflow of capital is as great as the inflow because it is probable that most of the loans have been made for the purpose of refunding old obligations bearing a higher rate of interest. In analyzing the purpose for which $44,580,035 of the loans were made, the board has found that 63 per cent of the proceeds were used to pay off mortgages; 10 per cent to pay other debts; 10 per cent for buildings and improvements; 8 per cent for the purchase of land; 4 per cent for the purchase of live stock; 3 per cent for the purchase of implements and equipments; and 2 per cent for the purchase of bank stock and for other purposes not specified.

21 It is the contention of every farm mortgage banker whom the writer has consulted that even in the older sections of the country, the federal land banks make a great many loans that no reputable farm mortgage company would consider well secured. There may be some truth in this contention. On the other hand it should be noted that the percentage of loans rejected by the land banks is very large. Up to November 1, 1918, the cancelled and rejected applications for loans amounted to $123,886,120. Further evidence of conservatism is shown in the ruling of the board that land devoted to fruit growing and having no appreciable value for other purposes, cannot be accepted as security for mortgage loans. On this point the practice of some reputable farm mortgage companies has not always been so conservative.

22 It is worth noting that twenty-two states made federal farm loan bonds legal investments for all fiduciary and trust funds before any such bonds had been issued. These states were Arkansas, California, Colorado, Delaware, Florida, Idaho, Maine, Minnesota, Mississippi, Nebraska, New Hampshire, New Jersey, Ohio, Oklahoma, Oregon, Pennsylvania, South Dakota, Tennessee, Texas, Utah, West Virginia, and Kansas. In the state of New York the governor declined to recommend to the legislature that such a measure be enacted, and there followed a spirited correspondence on the subject between Governor Whitman and Secretary McAdoo. (*Bulletin of the Farm Mortgage Bankers Association,* vol. IV, April, 1918, p. 14.)

was to be reduced by pledging mortgages as security for bond issues, so it was expected that through coöperative effort borrowers themselves would be able to reduce the administrative charge for loans. The specific machinery created for this purpose was not simple. It was provided that borrowers subscribe 5 per cent of the amount of their loans to the stock of a farm loan association; that the latter subscribe the same amount to the stock of a federal land bank; and that the commission paid by federal land banks to farm loan associations be deducted from dividends on land bank stock. The significance of this arrangement was that commissions would not be paid in advance, and that any portion of the charge not needed to cover expenses would be returned to the borrower in the form of dividends on stock.

It so happens that while the cost of borrowing has been reduced to those farmers who are members of farm loan associations, it has not been reduced in the manner originally contemplated. In fixing the rate of interest on loans at 5 and 5½ per cent when the interest rate on federal farm loan bonds was 4½ and 5 per cent, the administrative charge allowed by the board has been too small to permit the payment of dividends, and it has therefore been impossible for farm loan associations to retain any portion of the commission. Indeed it is difficult to perceive how these associations can ever meet their expenses out of a commission allowed by the federal land banks, when the amount of commission sufficient for that purpose will always be larger than dividends on land bank stock. For the present, however, this technical defect in the law has been overcome by the associations themselves. In some cases funds for current expenses are collected from members by means of assessments. There may be also a membership fee of $2.50 or $5 to be retained by the association whether a loan is made or not. In most associations the borrower contributes one-half per cent of the amount of his loan, or more, when the loan is closed.

The utility of the farm loan association as a principal source of land credit under the new régime is exceedingly doubtful. Even if dividends were paid on the stock of the federal land banks, it is not likely that the borrower would receive dividends on the stock of his association and at the same time be exempt from the payment of assessments. If it is contended that the borrower is relieved of the payment of commissions in advance, it should be noted that he is obliged to subscribe for stock out of his loan when there

is no immediate prospect that any of the subscription will be repaid. This charge alone is equivalent to a flat commission of 5 per cent payable in advance. Furthermore, the interval of time between the application for and the closing of a loan is necessarily long. Time is required not only for the organization of an association but also for the transaction of current business. The process of closing a loan is a complex mechanical operation—especially perplexing to men who have not been accustomed to administering the affairs of credit institutions. While some of the associations have placed themselves in a position to pay for the services of such officers as are needed, this is by no means the rule, and in those cases where salaries are paid they are quite insufficient to command the time and attention of efficient men. Under these conditions the business of the associations is not conducted with the degree of accuracy and dispatch to be found in the business of private firms. It is indeed an open question whether the attempt to economize in the services of efficient middlemen is, after all, sound economy. Finally, there is a distinct tendency on the part of those borrowers who have obtained their loans to lose interest in the loans made to others. This tendency, manifest from the start, is directly opposed to one of the purposes which the act sought to accomplish when it made the farm loan association an integral part of the system, namely, of cultivating the spirit of coöperation among farmers.

It is still too early to pronounce the federal farm loan system either a success or a failure. In the light of its slow progress and meager accomplishments, one would hesitate to call it a distinct success. But its record thus far cannot be made the basis for estimating its future worth. The system is still in the organization stage. If it proves to be unsuccessful, it is not likely to be abandoned but rather to be modified to suit American needs. For the time being, however, it is certain that a much greater measure of success could be assured if coöperation were made entirely voluntary and borrowers were permitted to resort to the method of individual contract in obtaining loans. With most of them the individualistic instinct is deep rooted, and it will require something more than mere legislation to make them coöperative at heart.

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LABOR TURNOVER

In the issue of this Review for June, 1918, an article appeared on "The Problem of Labor Turnover." The author, Mr. Paul H. Douglas, has given several instructive features on the definition, amount, and cost of labor turnover. The fourth part of the article, however, on the causes and remedies, is open to criticism on at least two points: first, the author omits to show that labor turnover is desirable to a certain extent; and, second, he practically ignores one very important remedy, namely, home ownership.

The general impression which is usually conveyed in discussions is that labor turnover is a social evil by 100 per cent. Viewed in a very narrow manner, this may almost be true; but considered in the broad light of human welfare there is nothing to support it. Migration from job to job, from industry to industry, from personal service to industry and from industry to personal service has marked advantages as well as disadvantages. Let the theoretical mental and physical tests be ever so perfect they never will and never can replace selection by actual application. Experience here, as in many other matters, is by far the best and most conclusive test. Not until the person has worked in the position or on the job will he, or some one more competent, know whether he is properly placed.

An individual's general satisfaction also enters into the problem. A man may be entirely capable of performing certain work and still he may not be contented. The place, the environment, the activity or lack of activity may not suit him. A multitude of whims affect one's likes and dislikes. The worker shifts about, for instance, in the plane of unskilled labor until he finds employment which appeals to his particular bent. Such shifting is desirable from the standpoint of the man and of the job. Improved theoretical tests may go far to measure a man's capability, but they will always fall considerably short in gauging adaptability. Experience seasoned by time will always satisfy the inclination. How often we find that an employee is doing satisfactory work but feels that he has "got to get into something else." Men change about until they strike "railroading." The job grows upon them. They stay during life or until pensioned. They may have had any number of jobs before taking up railroad work; however, here the nature of the work, the hours, the team-mates, the chances of promotion, all are to their liking. Whole families and even generations of families go "railroading" or "to sea" after selection by

experience. The satisfaction of the employee as well as capability brings the best results.

Another feature: Tens of thousands of instances are at hand to show that ability and capability change with age. For the boy, the young man, the middle-aged man, the elderly man, and the old man employment of different kinds is desirable and usually necessary. Furthermore, not only do the young grow old, but the lean grow fat, the weak grow strong, and the strong grow weak; the dull gain intelligence, while the bright through dissipation lose it. Methods and processes change through inventions and scientific management. Skill becomes obsolete and men refuse to change. Labor turnover readjusts the worker to the work. In certain industries the work is so strenuous that only the young and strong can endure its hardships. Labor turnover must supply the new blood.

Judgment ripens with age and many do not strike "life's gait" until middle age or later. One may pass from unskilled to skilled labor and then to various positions until the executive chair is reached. Some of the greatest administrators of our steel works were once dollar-a-day men, and some of our railroad presidents were once section hands or clerks. Labor turnover here in thousands of ways is evidence of advancements. Let the reader look back into his own career and he will possibly find an appreciable individual contribution to labor turnover. If the race is to live, women must leave gainful occupations and marry into homes. Labor turnover is a sociological necessity.

Due to changing economic conditions the entrepreneur must continually be on the alert to gauge the relative importance of land, labor, and capital; and labor turnover gives him one means of effecting the most economical use of these factors. Therefore, society is greatly benefited by that migration in employment which takes care of all these changes, unavoidable to a large degree. They are natural and must go on. To stop them is impossible, even fatal. Labor turnover is evidence of Mill's dynamic state.

The point to be emphasized here is not so much that a certain portion of labor turnover is desirable, but rather that the study and solution of this problem should divide itself into two broad phases: (1) to define and discourage undesirable turnover; (2) to define and encourage desirable labor turnover. For it is just as scientific to get an individual out of a job or position which he has outgrown or in which he has become inefficient as it is to get him

into one for which he is best fitted. The definition of desirable labor turnover will help to define undesirable turnover, and vice versa.

Home ownership as a remedy for undesirable labor turnover has either been ignored or has not been accorded the prominence it should have. Other things being equal, the worker living to rent in a multiple-family house cannot compare with the worker living in a home of his own. This holds for members of the family gainfully employed as well as for the head of the house.

Home ownership tends to reduce migration of labor. The semi-gypsy life of the renter has just the opposite effect. Every city has its great moving population. The renter often moves upon the slightest provocation. Instead of facing the problems of home building he avoids them. Instead of taking the constructive attitude of the home builder he is rather destructive. The difference in the mode of living and the philosophy of the two classes must have a marked effect upon their character and also upon their attitude in meeting their daily tasks.

Specifically, then, why should home ownership be encouraged to the maximum? The worker living in an individual home which he owns is more dependable and loyal. He has a direct economic interest in the city as a landowner and taxpayer, and therefore is a more responsible citizen and also a more responsible employee. The more serious attitude of the home owner naturally makes him more thorough in his work. But besides all this, home building affords one of the best avenues for self-expression. Every feature of the house and its surroundings—the arrangement of the rooms, the efficiency of the heating and lighting system, the products of the work-bench in the basement, the condition of the street, the walks, the parking, the garden, the lawn, the trees, the flowers—can and should be a source of great pride. Indirectly the home leads to greater self-expression in civic and social affairs. And activity in these affairs affords an outlet for the instincts of self-sacrifice and loyalty. Intelligent voting, prompt tax paying, acceptance of unremunerative civic positions—all give play to these instincts. In acquiring a home and in improving it, the instinct of saving is exercised and developed. Being a successful householder commands the esteem of one's fellows and leads to a high degree of self-respect.

Through this great institution, then, with all its problems and opportunities, the worker employed at monotonous labor and having in no way a real interest in the ultimate product, can find

abundant sources of mental activity during the trying hours of his task, and the instincts of self-expression, loyalty, self-sacrifice, and saving can have full play. Moreover, if his regular work tends to misdirect his physical development the chores in and about the house afford all-round physical exercise. The ultimate result is that the artificial regular work which has no end in itself is rather made a means to an end. It is a means, if the wages and hours permit, toward a full mental and physical development through home building and true citizenship—the foundation of democracy.

City planning and undesirable labor turnover are therefore inextricably interwoven. The city planner, to reduce labor turnover, must do his share in providing land room, good houses, and transportation for the man of small means. And in the United States the aim should be to stress the individual home. In Europe "housing" is in vogue, and it is taking hold here too. Great civic embellishments and colossal city grandeur in Europe stand side by side with widespread multiple-family housing. A committee of the Amalgamated Street Railway Employees of America made an inspection of the housing conditions of their fellows in Europe and in their report stated that few owned their own homes as the wages did not permit home ownership. It probably is not only a question of wages but also involves the economics of city planning. May not the excessive energy and money expended in civic beautification tend to deny the worker, if it does not directly deny him, the opportunity for having his individual home and make it impossible for him to exercise that incentive, that pride in having a sole economic interest in a home "all his own"? The most sacred duty of the American city planner, or replanner, is to so subdivide our precious and exhaustible gift of nature, land, that every square foot will count toward establishing lots within reach of the laborer and clerk. The ideal should be a minimum of investment, taxes, and special assessment, commensurate with comfortable living. House as many families in individual homes as possible and give them good transportation to all parts of the city. There is much at stake here in solving the evils of labor turnover and even labor unrest.

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Note: The American Economic Association could probably render no greater service to mankind than to study the inter-relations here suggested and point out a solution. The economist may well turn city planner. To have good homes in our cities is a national economic problem.

REVIEWS AND NEW BOOKS

General Works, Theory and Its History

The Economics of Progress. By J. M. ROBERTSON. (New York: E. P. Dutton and Company. 1918. Pp. vii, 298. $5.00.)

The Economics of Progress contains lectures delivered by the Right Honorable J. M. Robertson, M. P., to the Political and Economic Circle of the National Liberal Club. These lectures are printed as delivered, with little change, and can be said to make but small pretense to constituting a systematic treatise on economics.

This fact makes it somewhat difficult to classify the author with regard to schools of thought. He is obviously not an "orthodox" economist, for he attacks Professor Marshall all along the line and adopts a definition of capital which is quite different from that held to by most economists. The historical school he assails vigorously, defending Ricardo against their criticisms. His strongest affinity appears to be with the Fabian socialists; as his tendency seems to be towards a rather opportunistic state socialism to be arrived at through evolution rather than revolution: "The greatest of all revolutions, surely, is that gradually and peacefully wrought by evolution." He speaks of the complete historical falsification of the forecast of Marx and Engels.

Mr. Robertson's definition of economics is as follows: "The science of the proximate causation of the distribution of wealth, and of its increased production, in the industrial-social State." His work deals primarily with economic dynamics and his emphasis is on increased production. Production, as used by the author, concerns utilities rather than the "wealth" of classical and neo-classical economics, for he defines wealth as "the aggregate of the desirable things and services that are sharable and are in demand."

The author's point of view is that of one seeking to better conditions in the world, chiefly through securing an increased production, which to him also means an increased consumption. The sum and substance of his book is found on page 285, where he says:

> When there is a complete control of population, with no such net increase as compels emigration, the State can and will secure a more complete well-being for those whose toil sustains it. Given a substantially good system of education, with a sound fiscal system the twentieth century may well see before its close a much happier and more contented nation than now dwells in these islands.

His emphasis on the importance of restricted population is especially to be noted; and he says that "one thing is certain: There can be no good future for the human race without a continuance of that policy of limitation of births which we now see initially established in the teeth of irrational outcry and ignorant protest."

The various means of increasing production which he advocates constitute the framework of the volume. After a chapter on the Aim of Economic Science, which leads up to the definition already quoted, he discusses first the economics of education, pointing out the importance of this factor in connection with increased well-being. This chapter is followed by one on Economics of Labor, in which he stresses improvement in production, in his sense of that term; and advocates the fuller sharing of labor in its product. This latter is to be gained gradually by an increase in industrial management on the part of the state. Devices for decreasing unemployment, and old age pensions, appear to be the chief means of improvement which he advocates.

Chapter IV, on the Economics of Land, advocates various land reforms, such as the nationalization of mineral lands and taxation on unused lands. The single tax comes in for some very sharp criticism. This chapter is followed by one on Capital, which is chiefly taken up with problems of taxation. The author favors a tax on capital in addition to or in place of one on income.

> State banking is an enterprise still to be tried, involving uncertainties. State industries in peace are also problematical, though seen to be expedient if they can be profitably conducted. But in applying taxation, under due limitations, to capital, the state is merely exercising in a new direction one of its special functions; and in paying off debt with the proceeds it will be turning nationally negative capital into positive and productive; while at the same time potentially lessening the amount of idle life.

In chapter VI, Commerce is dealt with; and some lusty blows are struck in the cause of free trade.

It is perhaps in chapters VII and VIII, which deal with the Economics of Population, that the writer is at his best. He comes out strongly in favor of neo-Malthusianism; and, as already indicated, makes restriction of population a cornerstone in his logic:

> When it is announced that an agricultural laborer with fourteen children has a bad time of it, there are always zealous reformers who demand that he shall have proper housing accommodations. . . . Are the authorities to build houses with accommodation for laborers' families of sixteen? . . . That way madness lies. The philoprogenitive

parents must be told that they have no business to have families of fourteen, or ten or eight.

Certain adverse criticisms are called for. The author's shaky conception of the nature of capital is notable. He defines capital as "that portion of wealth and of credit, or command of wealth, used to obtain more command of wealth," thus adopting a private acquisitive conception which is inconsistent with his social philosophy. At the same time, he himself later distinguishes two kinds of capital: (1) capital yielding technically "unearned" income (land, houses, and scrip); and (2) capital fixed in productive undertakings. This distinction is clear evidence that the author has found the distinction made by most economists between "land" and capital to be an important one; and that his own definition of capital does not match with his social point of view. The author's individualistic-acquisitive interpretation of production is also inconsistent with his main body of thought. Other adverse criticisms are his questionable tax policy; his inadequate appreciation of the unused land problem (page 140); and his imperfect study of the history of tariff policy.

The strong features of the book are its statement of Malthusian theory and the principles of neo-Malthusianism; its strong defense of the Ricardian thought; and its convincing criticisms of the single tax theory.

LEWIS H. HANEY.

The Theory of Environment. By ARMIN HAJMAN KOLLER. (Menasha, Wis.: George Banta Publishing Company. 1918. $1.)

It is primarily with the scientific implications concerning environment that Dr. Koller deals, yet throughout there is most fruitful suggestion bearing upon the whole range of those social and legal proposals which are now a part of all "reconstruction" views. Writers divide with every degree of emphasis on individualistic or collectivist lines. There is perhaps no more fundamental contention in the socialist approach than that of man's power to mould the milieu after his will. On the other side climate, geography, the whole *Umwelt* (to describe which the Germans have forty different words), are held to show how light in the balance is the fussy pretention of the reformer. The dispute is as old as human thought, and people will doubtless quarrel over it as long as diversities of temperament continue in the race. Attempts to secure social and labor legislation are troubled by the

same antagonisms. One insists that the external changes proposed by the bill in hand will be useless because they cannot affect character. Another is confident that character has no chance until the outward changes have taken place.

One learns among these social questions that nothing is so practical as a theory. One of our most conscientious "single taxers" refuses to help in tenement house reform, "because better homes for workingmen are useless under our present vicious tax system. Replace this chaos by the single tax and the evil of overcrowding and bad tenements passes away forever." The theory of Mr. George, strictly construed, makes this attitude consistent and unanswerable.

With far more intelligent qualifications, the "statesman-scholar" John Morley states the case.

> In particular, I have long felt that the prevailing tendency to regard all the marked distinctions of human character as innate, and in the main indelible, and to ignore the irresistible proofs that by far the greater part of those differences, whether between individuals, races, or sexes, are such as not only might but naturally would be produced by differences in circumstances, is one of the chief hindrances to the rational treatment of great social questions and one of the greatest stumbling blocks to human development.

It is upon a reasoned and balanced view like this that social legislation and reform must justify itself.

What Dr. Koller does for us in this introductory study is to analyze with skill and singular detachment the opinions of a great variety of writers on this question. It is part first of what promises to be a most enlightening contribution. He says in his preface:

> Setting about to inform myself on the history of the theory, I determined to obtain for myself, if possible, a tolerably complete idea, at least in its essentials, of the theory of milieu, to see where the theory led to, where it started from, what changes it has undergone, and what were its ramifications.

We are given first a history of the milieu down to the nineteenth century with a careful noting of the still more recent discussions. Then follow chapters on: Anthropo-geography; Geography and history; More recent anthropo-geographical treatises; Primitive peoples and environment; Society and physical milieu; Government, war, progress, and climate; Climate and man's characteristics; Man's intellect and physical environment; Religion and physical milieu; Climate and conduct; and Climactic control of food and drink.

"He fixed thee 'mid this dance
Of plastic circumstance"

are Browning lines for an opening text. How "plastic" is circumstances and how "fixed" are we in the dance? We shall await with real interest the completion of this work.

JOHN GRAHAM BROOKS.

NEW BOOKS

ADAMS, H. C. *Description of industry. An introduction to economics.* (New York: Holt. 1918. Pp. x, 270. $1.25.)

The growing introduction of economics into the curricula of high, vocational, and other secondary schools necessitates suitable textbooks. College and university professors have found it difficult, when importuned by their former students who were called upon to teach the subject to younger pupils, to name a suitable book. To those of the high school age certain subjects may be taught quite fully while others become too difficult if carried beyond an elementary treatment. Reality, concreteness, freshness are most desirable; and it is unfortunately true that many who are compelled to teach the subject have had only very inadequate training themselves. Too many books prepared for this field have been mere abridgments of large treatises and the process of condensation has squeezed out what little juiciness the original may have had so that it has become the dryest of emergency rations which the teacher has not the wherewithal to freshen and make appetizing. It is still a moot question what topics should be taught in secondary schools, in what proportions and by what methods. If some economist, skilled and experienced in teaching, openminded and adjustable, would devote a few years to high school teaching of economics, his deductions and conclusions should be valuable to democratic citizenship, for it is desirable that the great numbers of citizens who vote upon economic policies should have at least an elementary knowledge of economic experience and principle. Professor Adams' little volume seems to the reviewer by far the best attempt yet made to meet the needs of secondary schools. There is little use of technical terms; the order of treatment varies from the customary in a pleasing way; the style is in the main fresh and interesting; and there is more attention paid to the legal framework of industrial society than is customary. "The essential and enduring principles of the science are fully recognized." Until more successful inductive methods have been developed, didactic teaching of economics must prevail and this volume is a most promising attempt to supply the need. HERBERT E. MILLS.

AYRES, CLARENCE EDWIN. *The nature of the relationship between ethics and economics.* (Chicago: Univ. Chicago Press. 1918. Pp. 58.)

The central idea of this book is contained in the statement that "the problem of economics is to contribute its study of industrial society to the solution of the problem of living." The individualistic

conception of ethics has given place to social ethics, and as such its relationship to economics is necessarily close. The study is somewhat disappointing in that the real thesis is only suggested in the last few pages after a long discussion of economic and ethical theory. G. L. ARNER.

BENJAMIN, E. B. *The larger liberalism. Outlines of a social philosophy for the United States of America.* (Cambridge, Mass.: University Press. 1918. Pp. vi, 199.)

That liberalism for at least a quarter of a century has been treading a steeper and thornier path is one of the commonplaces of publicists. That the war has left it apparently shattered and very helpless is no less obvious. Yet everywhere are the faithful who defend it and look forward to its revival.

The present rather slight study admits the embarrassment and failings of traditional politicist liberalism but looks to its "larger" expression. The author finds both reformer and his suggested specifics very faulty, for life is "dominated by the two essential non-idealistic elements, struggle and scarcity. The consequences of this condition must be faced without flinching: we perceive reform to be possible; revolution, not improbable but impossible. The conclusions arrived at are that effective reform must aim at the elimination of anti-social struggle and at the overcoming of the fundamental scarcity."

If there is any other available wisdom to meet this difficulty, we may look for utopian results. "Some day there shall come to this earth such a race of men and women as we all dream of: kind, efficient, astute, beautiful in every case with the grace and dignity of well-meaning."

Two or three properly doctored Germans have written about an "intermediate sex." The name Urnings or Uranians has been given to this "Zwischen Ding." It may be unfair to class the author of *The Larger Liberalism* with these investigators. Yet when his super-race has been reached, "men will be men and yet part women; women will be women and yet part men. Maternity will be introduced into the state, the home and the workshop." The main body of the book contains some excellent material. In five chapters, (1) The Indictment of the Existing Order, (2) Suggested Remedial Orders, (3) A Critique of the Indictment, (4) Criticism of the Theories of Social Reform, (5) The Revolution at Hand, the author deals critically and sometimes acutely with his topic. The chapter on anarchism, socialism, syndicalism, guild socialism and the English labor program shows much careful study.

We are told in the introduction: "It is the fortune of the author, in contrast, to be a business man, one of the new generation of American employers. In his college days a keen student of distributive justice, the author has maintained an intense interest in the subject on leaving his university for the place awaiting him in industry. To the author, as to a growing number of other business men, his vocation has meant from the beginning something more than mere

money-getting—meant in fact something very much akin to a profession in the best sense of the term."

JOHN GRAHAM BROOKS.

BENNION, M. *Citizenship. An introduction to social ethics.* (Yonkers, N. Y.: Wld. Bk. Co. 1917. Pp. xviii, 181. $1.)

This book is designed for classes in social ethics in the last year of high school or the first year of college. It considers practically all important problems of citizenship—economic, political, educational, those of the family and of internationalism. Among its thirty-five chapters are: The Meaning of Civilization, The Nature of Justice, Our Literary Inheritance, The Conservation of Natural Resources. In chapters of about four small pages each are discussed Public Ownership or Regulation of Public Utilities, Principles of Taxation, Business Organizations, Social Institutions—Family, Church, State. The treatment is necessarily sketchy and *ex cathedra.* There are excellent and suggestive questions to accompany each chapter. That there is great need of instruction in problems of citizenship which shall not simply give information about political forms but provoke thought in relation to socio-ethical obligations is beyond question. In the hands of one who like the author is not only a skilled teacher but well trained in the social sciences, this book would serve as an excellent introduction. But there are few high school teachers who are prepared even with it as a guide to discuss at all intelligently these profoundest and ultimate problems of human relationship. No references or suggested readings are given although these would seem absolutely necessary to the use of the book both by teacher and pupil. Perhaps the best judgment of the book is that contained in Professor Snedden's introduction when he says that it is "both a favorable symptom and a promising augury," and that it is necessarily a pioneering work of its kind and that long experience and exploration will be required before finished results can be expected.

HERBERT E. MILLS.

BROWN, H. G. *The theory of earned and unearned incomes. A study of the economic laws of distribution with some of their applications to social policy.* (Columbia, Mo.: Missouri Bk. Co. 1918. Pp. xi, 258.)

CHAPMAN, S. J. *Outlines of political economy.* Third edition, revised and enlarged. (New York: Longmans. 1917. Pp. xvi, 463. $1.75.)

Although this third edition has involved a "resetting of the type," it is substantially the same book as the first edition except for the brief sketch of the Development of Political Economy which seems to have been added to the second edition. Some ten pages discussing problems growing out of the war have been inserted. The unpleasant use of the first person has been notably decreased. Otherwise there seems no reason to modify the judgment passed upon this book on pages 323-325 of volume two of this REVIEW.

H. E. M.

CLAY, H. *Economics. An introduction for the general reader.*

American edition, revised by E. E. Agger. (New York: Macmillan. 1918. Pp. xviii, 456. $2.)

To be reviewed.

Cooley, C. H. *Social process.* (New York: Scribners. 1918. Pp. vi, 430. $2.)

To be reviewed.

Folwell, W. W. *Economic addresses.* University of Minnesota, current problems, no. 9. (Minneapolis: Univ. Minn. 1918. Pp. 99. 50c.)

Contains addresses on ethics of business, trusts, single tax, socialism true and false, and the new economics.

Hayes, E. C. *Introduction to the study of sociology.* (New York: Appleton. 1918. Pp. xviii, 717. $2.50.)

Hecht, J. S. *A challenge to economists.* (London: King. 1918. Pp. 44.)

In this discussion of the theory of value it is contended that the basis of all value is the utility of necessaries of life. Aside from basic "intrinsic value" there is an exchange value due to the desire for luxuries. The difference between intrinsic value and exchange value is the "demand value." The author argues for a protective tariff in order that the country may be able to produce commodities of high "intrinsic value." G. L. A.

Mackenzie, J. S. *Outlines of social philosophy.* No. 52 in the series of monographs by writers connected with the London School of Economics and Political Science. (London: Allen & Unwin. 1918. Pp. 280. 10s. 6d.)

O'Hara, F. *Introduction to economics.* (New York: Macmillan. 1916. Pp. vii, 259. $1.)

This is an admirable introduction along traditional lines. It presents the fundamental principles in clear, concrete style. By confining his treatment to elementary theory almost entirely and by careful elimination of more advanced points, the author has been able to give essentials in a very moderate amount of space. The book is for a brief condensation unusually readable. The general point of view is conservative and Marshall, Taussig, Seager, and Seligman are the constant authorities. The questions at the end of each chapter are confined to the text and they, as well as the subject-matter, seem intended to secure in the student knowledge of economic principles rather than to encourage independent thinking.

Herbert E. Mills.

Smith, W. S. *Economics, a textbook for the use of high schools, colleges and universities.* (Boston: Roxburgh Pub. Co. 1918. Pp. 213. $1.50.)

Watt, L. *Elements of economics.* (London: Catholic Social Guild. 1918. Pp. 48. 3d.)

Economic History and Geography

Democracy after the War. By J. A. Hobson. (London: George Allen and Unwin, Ltd. 1917. Pp. 215. 4s. 6d.)

It is becoming a common saying that in these days of world travail a social order that has been reared through generations of leisurely evolution is rapidly disintegrating under the irresistible pressure of competitive warfare. The old order not only changes; it disappears. While these are undoubtedly over-statements, it requires no virile imagination to appreciate that the war has wrought changes in our economic and social organization which are of profound significance. As throwing light upon this problem of a new industrial and social order, this volume on *Democracy After The War*, by one of the most versatile as well as most liberal of modern economists, has made an unusually timely appearance. With rare insight into the workings of social forces, Hobson portrays the nature of the struggle that must come after the war before real democracy can be achieved.

The book is divided into two parts: (1) The Enemies of Democracy and (2) The Defense of Democracy. Part I has the following chapter headings: Militarism and the Will to Power; Militarism and Capitalism; The Defense of Impropriety; Protectionism and Imperialism; Political and Intellectual Reactionists; and Spiritual and Social Reactionists. Part II, the following: How to Break the Vicious Circle; The New Economic Situation; Two Problems for Labor; The Conquest of the State; The Close State versus Internationalism.

In brief, the author argues that the forces of reaction will be more closely consolidated at the end of the war than ever before, and more conscious of their community interest. They will have at their disposal a large number of new legal instruments of coercion and the habits of obeying them derived from several years of use. All the educative and suggestive institutions, such as the church, schools, the press, and places of amusement, will be poisoned with false patriotism and class domination which masquerades as national unity. On the other hand, he sees that the war has generated a powerful fund of genuine democratic feeling. He feels that the contrast between the liberties for which people were fighting and the new restraints for peace will be at once disconcerting and instructive. He sees that economic and financial struggle will everywhere break up the artificial national unity of war time. He urges that the grave political cleavages that will

develop around the issues of reconstruction will set free large volumes of political energy for new political and economic experiments. Further, many of the old customs and sanctions so powerful in England will be broken down. "The raw material and energy for a great democratic movement will be at hand, provided that thought, organization, and direction can make them effective" (p. 212).

Hobson sees a "vicious circle" of recreation confronting democracy at the end of the war consisting of: the militarist bureaucracy who are now in control of affairs, church, school, and press, conservative landlords, capitalism, legalism, militarism, protectionism, and imperialism. To break this "vicious circle" he insists that no single panacea will suffice. The "apparently unrelated reactionary forces" are so unified that it is necessary to develop a coördination in the forces of democracy:

> If we can show the keen land reformer that he cannot in fact gain his object except by throwing his energies into the broad movement to recover and enlarge the liberties of the people; if we can make the educationalist, the temperance man, the "social purist," the hygienist, the franchise leaguer and the other specialists recognize that they also can only make progress to their desired goal by perceiving and feeling its organic unity with the general cause of democracy, we shall for the first time begin to realize that hitherto baffling hope which has deluded several generations of democrats, the power of numbers. . . . If the experiences of this war have not revealed . . . the necessity of expelling from all specialist progressive movements those elements which are unable to take the wider outlook and to respond to the larger intellectual appeal, we can only conclude that our people are incapable and therefore unworthy of democracy. . . . Our hope lies in the conviction that the fierce light of war and its glowing aftermath will show men that, unless an ordered popular will can flood all the main channels of national life, intelligently controlling all the major organs of government and influence, State, economic system, church, press, schools and universities, and the creative and relief adjuncts, there is and can be no security for anything that ordinary men and women value in life (pp. 158-161).

To accomplish their ends it will be necessary, in the author's view, for democracy to make a conquest of the state. He sees in the disposition of some labor elements "to give the go-by to the state, as a capitalist instrument, and to fall back upon new plans of coöperation, trade-unionism, syndicalism or guild Socialism" a dangerous fantasy.

While Hobson is a stanch believer in political and industrial democracy he underestimates neither the difficulties of its attain-

ment nor the tremendous problems involved in its successful administration. For instance, he warns the English proletariat that any effort to limit productivity can spell only disaster. This does not necessarily involve any painful or injurious intensification of toil; it may be accomplished by improved organization of labor and of industrial management generally. In no other way can the masses hope for a permanently improved standard of living. Statistics are presented which show that the pre-war income of England if equally distributed would not suffice to give the average family "the full requirements of a civilized modern life" (p. 173). Hobson argues that owing to the great destruction of capital during the war the national income after the war will be lower than ever.

In the reviewer's opinion *Democracy After The War* may be compared not unfavorably with Veblen's *The Nature of Peace.* It shows quite as keen an insight into human nature and social processes; and it is broader in its scope, containing much more in the way of constructive suggestion. The book deserves the widest reading in this country from the standpoint of its cultural value as well as its application to the problems of economic and social reconstruction which now confront the American democracy.

H. G. Moulton.

University of Chicago.

Economic and Social History of Chowan County, North Carolina, 1880-1915. By W. Scott Boyce. Columbia University Studies in History, Economics, and Public Law, Vol. LXXVI, No. 1; Whole No. 179. (New York: Longmans, Green and Company. 1917. Pp. 293. $2.50.)

Chowan County was one of the original precincts of the Lords Proprietors, but was settled prior to the granting of the charter of 1663. Its county seat and only town is Edenton, one of the oldest communities in North Carolina, and one which has contributed a body of men of eminence in state and nation out of all proportion to its population. For more than a century it was not only the center of the political and intellectual life of that section of North Carolina, but was also its most important town, having only in later years been distanced by Elizabeth City. Since 1800 the county has had a negro majority and its whole history has been greatly influenced thereby. The chief occupation is and has always been agriculture. Fishing comes next with lum-

bering and manufacturing well down the scale of relative importance. In all respects it is a fairly typical county of the section of the state in which it lies.

This sizable monograph is by a native of Chowan County and is in part based upon his own experience and observation. It is divided into four parts. The first consists of two chapters dealing with the physical characteristics and the population of the county. The second part, called Development of Economic Life, contains eleven comparative chapters on agriculture, fishing, manufacturing, lumbering, transportation, and labor and wages in the eighties and in 1915. The third part, called Development of Social Life, contains eight similar comparative chapters on education, social customs, the churches, sanitation and hygiene, and necessaries and comforts. The fourth part is devoted to Conclusions. An appendix contains twenty-four tables, compiled in part from census reports and in part from the author's own calculations, which are used as a basis for much of the discussion in the body of the work.

The chief value of the book lies in its preservation of knowledge of many habits and customs of the people which are now disappearing, and in the material contained in the chapters on fishing, lumbering, communication and transportation, and wages and labor. As a complete study of the scope indicated in the title the book is distinctly disappointing as to form, content, method, and tone. It may well be questioned if the social and economic history of one small county for a period of thirty-five years is a suitable subject for so extended a study, but even if an affirmative answer be given, the volume under discussion is scarcely justified. It is not a social and economic history of Chowan County for the period named, but is rather a rough contrast of conditions at the beginning and end of the period, containing a great amount of material bearing upon the questions under discussion, some of it of value, but a large part of it of small importance. Much of it is inaccurate as well. The thesis of the work, if it may be said to have any, is that conditions were hopelessly bad at the beginning of the period, that they are very bad today, but that some improvement may be noticed along nearly all economic and social lines.

Conditions in 1880 are painted as very dark—in many respects darker than they really were—and there is no convincing interpretation of the causes. In spite of an elaborate argument to prove

that the year 1880 was a normal one, with an implication that benefit had already come from the Civil War, any one who is familiar with conditions at that time knows that, however much the state was ultimately to profit from the abolition of slavery, there was still widespread depression which touched all classes of the people and all activities of life. There is little if any appreciation of the influence of a negro majority, potent as that influence has been and clearly as it appears in his recital.

Throughout there is a marked tendency to sweeping generalizations. For example, only in rare instances is any distinction made between black and white, and while a majority of the population is colored, it nevertheless remains a fact that whatever may be the value as a statistical study of a work which fails to make a clear distinction between the races, it is certainly of small value as history. In the same way, Edenton, with from 23 to 30 per cent of the population of the county, is rarely excepted from statements which cannot possibly apply when it is included. In the chapter on agriculture the author displays an apparent ignorance of the fact that the county contains some very rich lands and that for generations it has had a group of farmers known all over eastern North Carolina for their skill, progressiveness, and success. An example of the absurdities which are frequent is seen in the statement (p. 158) that the principal light in the homes of the county during the eighties was furnished by lightwood knots! It is impossible in limited space to enumerate the examples of such errors.

The tone of the book is highly critical, as much so as the method is uncritical, and in many places it is sneering. Particularly do the religious beliefs and practices fall under the ban of an assured condemnation. The tone is so prevalent that one cannot read the chapters on manufacturing in the eighties and in 1915, in the former of which the author shows the capacity for self-maintenance of the people in a bitterly trying time and closes with a poor and labored imitation of Helper's famous epitome of Southern economic dependence, without feeling that in the writer's opinion such self-support was little short of a crime. The sneering tone is emphasized by constant employment of slang which makes a most unpleasant impression upon the reader.

J. G. de Roulhac Hamilton.

University of North Carolina.

NEW BOOKS

AMBRAVANSWAR, S. *Progress and problems of industrial India.* (Trichnopoli: Brahmanand Press. 1918. Pp. 30.)

BALKRISHNA. *Industrial decline in India.* (Allahabad: Star Press. 1917. Pp. 408. Rs. 2-8.)

BISHOP, A. L. and KELLER, A. G. *Industry and trade; historical and descriptive account of their development in the United States.* (Boston: Ginn. 1918. Pp. 426. $1.32.)

BISHOP, J. B. *A chronicle of one hundred and fifty years: the Chamber of Commerce of the State of New York, 1768-1918.* (New York: Scribners. 1918. Pp. xviii, 311. $5.)

The Chamber of Commerce of the State of New York, "the oldest institution of its kind in the world," has fittingly celebrated its sesquicentennial anniversary by publishing a history of its chief activities with a note of the men who have been identified with it. The record is an honorable one, for in its long career, the chamber has been connected with most of the movements which have characterized the nation's history. Founded in the stirring year of 1768 it early assumed an attitude in opposition to British taxation. It is interesting to note also that even at this early period it took steps as well in the interest of sound money and of pure food.

After the Revolution, during which control over the organization had fallen into the hands of loyalist members, the chamber was reorganized. During the next thirty years the members on the whole favored free trade, but by 1840 the swing to protection was quite as pronounced. The members took an active interest in public affairs, approving of the Erie railroad and other internal improvements. When the Civil War broke out the chamber was prompt to act in support of the government and the national credit, although it favored the issue of legal tender notes. Later its members took a leading part in the defeat of the Tweed ring, in the construction of subways, and in other local matters.

The list of officers and of members is a roster of names of those prominent in the leading movements for improvement and progress not only in local affairs but also in national questions. The writer of the "chronicle" has been able to weave together out of the minutes of the chamber a narrative of interest. But, more important, the narrative shows that business men have been on the right side of almost all the great problems which have presented themselves for solution in the past one hundred and fifty years.

E. L. BOGART.

BRADLEY, H. *The enclosures in England. An economic reconstruction.* Columbia University studies in political science, vol. XXX, no. 2. (New York: Longmans. 1918. Pp. 122. $1.25.)

BRIGHAM, A. P. *Commercial geography.* Revised edition with questions. (Boston: Ginn. 1918. Pp. xv, 489.)

BROOKS, A. A. *Index to the bulletin of the American Geographical*

Society, 1852-1915. (New York: American Geog. Soc., Broadway and 156th St. 1918. Pp. 142.)

Contains many titles of particular interest to the student of economic history. Numerous articles are listed on population, railways, and canals.

BROWNE, B. C. *Selected papers on social and economic questions.* (Cambridge, Eng.: University Press. 1918. Pp. xvii, 287.)

Contains thirty-two papers written by Sir Benjamin Chapman Browne at various times between 1886 and 1917. Among them are: The engineering dispute (1898); three articles on the workmen's compensation act (1905); The state of trade (1907); Copartnership and unemployment (1908); Industrial peace (1911); and Ownership of capital (1913).

CLARK, J. M., HAMILTON, W. H., and MOULTON, H. G. *Readings in the economics of war.* (Chicago: Univ. Chicago Press. 1918. Pp. xxxi, 676. $3.)

A useful series of readings listed under the following general headings: (1) Economic background of war; (2) War as a business venture; (3) The nature of modern war; (4) Resources of the belligerents; (5) The problem of industrial mobilization; (6) Obstacles to rapid mobilization in liberal countries; (7) War-time regulation of trade and industry; (8) Food and fuel; (9) Transportation; (10) War finance; (11) Prices and price control; (12) Labor and the war; (13) The costs of the war; (14) War's lessons in the principles of national efficiency; (15) Economic factors in an enduring peace; and (16) After-the-war problems. The authors have been hospitable to varying points of view and the editorial notes are helpful.

COOPER, C. S. *Understanding South America.* (New York: Doran. 1918. $2.)

DUNLAP, W. *A history of the rise and progress of the arts of design in the United States.* New edition, edited by F. W. BAYLEY and C. E. GOODSPEED. (Boston: Goodspeed Co. 1918. $15.)

ELY, R. T. *The world war and leadership in a democracy.* Citizens library of economics, politics, and sociology. (New York: Macmillan. 1918. Pp. 189. $1.)

FRIEDMAN, F. M., editor. *American problems of reconstruction. A national symposium on the economic and financial aspects.* (New York: Dutton. 1918. Pp. xxvi, 471. $4.)

This is a collection of brief papers under the general headings: A perspective of the problem; Efficiency in production; Adjustments in trade and finance; and Programs, monetary and fiscal. Among the papers to be especially noted are: Our mineral reserves, by G. O. Smith (pp. 59-87); Capital, labor and the states, by L. B. Wehle (pp. 153-176); Concentration and control in industry and trade, by W. B. Colver (pp. 177-195); The free port as an instrument of world trade, by E. J. Clapp (pp. 245-266); Government aids to

trade, by C. D. Snow (pp. 279-303); Stabilizing foreign exchange, by R. L. Owen (pp. 321-343); Stabilizing the dollar in purchasing power, by I. Fisher (pp. 361-390); The war and interest rates, by E. W. Kemmerer (pp. 391-414); Fiscal reconstruction, by E. R. A. Seligman (pp. 427-446).

JEUDWINE, J. W. *The foundation of society and the land. A review of the social systems of the Middle Ages in Britain, their growth and their decay, with special reference to land user, supplemented by some observations on the connection with modern conditions.* (London: Williams & Norgate. 1918. 18s.)

HACKETT, F. *Ireland. A study in nationalism.* (New York: Huebsch. 1918. Pp. 404. $2.)

HOBSON, J. A. *The evolution of modern capitalism. A study of a machine production.* Contemporary science series. New edition. (New York: Scribners. 1917. Pp. xvi, 488.)

The only change in this new edition as compared with that of 1906 is a new chapter of forty pages divided into two parts. The first of these supplements the treatment in the previous edition by brief summaries of tendencies between 1906 and the opening of the war, such as the continued growth of large joint-stock enterprises, the establishment in certain industries of a representative or dominant size and structure of business unit, new developments of combination, changes in the distribution of workers among industries, increase of women wage-earners, growth of internationalism in trade and finance; and the rise of prices. The second part, the point of view of August, 1916, deals with "some of the new economic facts and forces revealed by the experiences of the war." The topics considered are the revelation of reserve productivity in war time; the problem of business reconstruction which seems necessary because of defects made apparent during the war; the future attitude of the state toward "key industries" such as railways, mining, shipbuilding, munitions; the inevitable extension of state regulation of wages, unemployment, banking and credit, agriculture; the series of fiscal policies growing out of war debts. But all governmental economic policies will depend upon political policies. "The only escape from the costs and perils of economic nationalism" which endangers world progress and threatens renewed warfare is a "fuller measure of economic internationalism secured by improved political arrangements between the Powers."

HERBERT E. MILLS.

LEUPP, F. E. *George Westinghouse: his life and achievements.* (Boston: Little, Brown. 1918. $3.)

LEROUX, A. *La colonie germanique de Bordeaux: étude historique, juridique, statistique, économique.* (Bordeaux: Feret. 1918. Pp. xii, 263.)

LOURIÉ, O. *La russie en 1914-1917.* (Paris: Alcan. 1918. Pp. 55. 4 fr.)

MACFARLANE, C. W. *The economic basis of an enduring peace.* (Philadelphia: Jacobs. 1918. Pp. 80. $1.)

Discusses the distribution of supply of coal and iron in western Europe and more particularly the relationship of the deposits in Lorraine and France with reference to the peace settlement. The author summarizes the policy of exploitation which Germany has followed. Contains useful maps and statistics.

MASTERMAN, C. and others. *Problems of reconstruction: a symposium.* (London: Allen & Unwin. 1918. 8s. 6d.)

NIMS, M. R. *Women in the war. A bibliography.* (Washington: Women's Committee, Council of National Defense. 1918. Pp. 77.)

OUALID, W. *The special problems of reconstruction in France.* (Rome: Athenaeum. 1918. Pp. 4.)

PUTNAM, J. W. *The Illinois and Michigan canal: a study in economic history.* Chicago Historical Society collection, vol. X. Illinois Centennial publication. (Chicago: Univ. Chicago Press. 1918. Pp. xiii, 213. $2.)

RAFFALOVICH, A. *Russia: its trade and commerce.* (London: King. 1918. 12s. 6d.)

RATCLIFFE, S. K. and TEAD, O. *British industrial reconstruction programs; their substance, purposes and application to American conditions.* (New York: Holt. 1918.)

RONZE, R. *La question d'Afrique. Etude sur les rapports de l'Europe et de l'Afrique depuis les origines jusqu'à la grande guerre de 1914.* (Paris: Alcan. Pp. xi, 391. 7.70 fr.)

RUPPIN, A. *Syria: an economic survey.* (New York: Provisional Zionist Committee. 1918. Pp. 92. 75c.)

RUSSELL, C. E. *Unchained Russia.* (New York: Appleton. 1918. Pp. 323. $1.50.)

SNIDER, L. C. *Geography of Oklahoma.* (Norman, Okla.: Oklahoma Geological Survey. 1918. Pp. 325. $1.50.)

VERRILL, A. H. *Getting together with Latin America.* (New York: Dutton. 1918. $1.50.)

VILLIERS, B. *Britain after the peace.* (New York: Dutton. 1918. $2.50.)

WHITE, B. *The book of Daniel Drew.* (New York: Doran. 1918. $1.50.)

WOOD, C. W. *The great change.* (New York: Boni and Liveright. 1918. Pp. 214. $1.50.)

Interviews with men who have been driving the country's war machine form the basis of the chapters of this book. Charles M. Schwab, Bernard Baruch, and F. P. Walsh are quoted, and an attempt is made to analyze the sweeping economic and social changes made necessary by war conditions. Cheerful coöperation of labor

and capital has been secured, workers have been sent where they were needed, new industrial recruits have been trained, and more human working conditions have been provided. To obtain maximum production at maximum speed, competition has been eliminated, distribution simplified, and patterns standardized. Production for the common good, not for profit, has been behind the "win-the-war" slogan. A transition from the age of capitalism to the age of industrial democracy has been inaugurated. Democracy, according to the author, is not releasing people's opinions for unlimited debate, but releasing all their energies for creative work. Political changes exemplified by the waning power of Congress have accompanied the industrial ones. The reader is left to ponder these questions: Will the spirit of coöperation aroused during the first months of 1918, long endure? Have we as a nation, intelligence enough to perfect this system of production for the common good, instead of reverting to the old conditions?

LAURA PERRY ARNER.

The effect of the war on business conditions, with particular reference to post-war production and markets. (New York: Blackman-Ross Co. 1918. Pp. 81.)

The eighteenth financial and economic annual of Japan. (New York: Akiva Den, Japanese Financial Commissioner, Woolworth Bldg. 1918. Pp. 198.)

Reconstruction after the war. Journal of the Institute of Social Sciences, vol. IV. (Boston: Faxon. 1918.)

Agriculture, Mining, Forestry, and Fisheries

NEW BOOKS

BOERKER, R. H. D. *Our national forests.* (New York: Macmillan. 1918. Pp. 238. $2.50.)

BONE, W. A. *Coal and its scientific uses.* (New York: Longmans. 1918. Pp. 491. $7.)

DIXON, H. M. and DRAKE, J. A. *A study of farm management problems in Lenawee county, Michigan.* Dept. bull. 694. (Washington: Dept. Agriculture. 1918. Pp. 36. 10c.)

EARNSHAW-COOPER, W. *The land industry.* (London: Central Committee for National Patriotic Organizations, 62 Charing Cross. 1918. Pp. 52.)

GILBERT, C. G. and POGUE, J. E. *Power. Its significance and needs.* Smithsonian Institution, bull. 102, pt. 5. (Washington: Supt. Docs. 1918. Pp. 53.)

JACKSON, T. C. *The agricultural holdings acts, 1908-1914.* Third edition, enlarged. (London: Sweet & Maxwell. 1917. Pp. xvi, 356.)

PROTHERO, R. E. *English farming, past and present.* Second edition. (New York: Longmans. 1918. $2.50.)

PULLING, A., editor. *Food control manual revised to April 30, 1918, comprising the food controller's powers and orders, etc.* (London: Wyman. 1918. Pp. 615. 5s.)

RADFORD, G. *Our daily bread.* (London: Constable. 1918. Pp. 127. 4s. 6d.)

RAM, G. *The agricultural problems of India.* (Simla: Manzur Ali, at the Army Press. 1917. Pp. iv, 155.)

REMY, H. *La question des sucres et le ravitaillement de la France pendant la periode 1914 à 1917.* (Paris: Sirey. 1918.)

ROUSH, G. A. *The mineral industry.* Vol. XXVI. (New York: McGraw-Hill. 1918. Pp. 900. $10.)

SMITH, G. O. *The economic limits to domestic independence in minerals.* Mineral resources of U. S., 1917, pt. I. (Washington: Supt Docs. 1918.)

SWEM, E. G. *A contribution to the bibliography of agriculture in Virginia.* (Richmond: State Library. 1918. Pp. 35.)

TANIMURA, I. *Livestock economics.* (Shiba, Tokyo: Oriental Prtg Co. 1917.)

THOMPSON, J. W. *California mining statutes annotated. Including all California mining laws.* U. S. Bureau of Mines, bull. 161, law serial 13. (Washington: Supt. Docs. 1918. Pp. 312. 20c.)

WIDTSOE, J. A., editor. *Western agriculture.* (St. Paul, Minn.: Webb Pub. Co. 1918. Pp. 464. $1.)

WYER, S. S. *Natural gas: its production, service, and conservation The mineral industries of the United States.* Smithsonian Institution, U. S. National Museum, bull. 102, pt. 7. (Washington: Supt Docs. 1918. Pp. 70.)

Agricultural policy of sub-committee of the reconstruction committee Report (9079). *Summeries of evidence, with index* (9080). (London: Wyman. 1918. 1s. 3d. each.)

Farm allotments and farm laborers' allotments in the Durham state land settlement located at Durham, Butte county, Cal. (Sacramento State Land Settlement Board. 1918. Pp. 10.)

Northwest mines handbook; a reference book of the mining industry of Idaho, Washington, British Columbia, western Montana, and Oregon. Vol. 1. (Spokane, Wash.: Northwest Mining Association 1918. Pp. 366.)

Petroleum, asphalt and natural gas. (Kansas City, Mo.: Kansas City Testing Laboratory. 1918. Pp. 248. $2.)

Manufacturing Industries

NEW BOOKS

GUTHRIE, E. S. *The book of butter; a text on the nature, manufacture and marketing of the product.* (New York: Macmillan. 1918 Pp. 270. $1.75.)

KELLY, R. W. and ALLEN, F. J. *The shipbuilding industry.* (Boston.: Houghton Mifflin. 1918. $3.)

LLOYD, S. L. *Mining and manufacture of fertilizing materials and their relation to soils.* (New York: Van Nostrand. 1918. Pp. 153. $2.)

MANLOVE, G. H. *Scrap metals, study of iron and steel old material, its preparation and markets.* (Cleveland, O.: Penton Pub. Co. 1918. Pp. 278. $2.)

PILCHER, R. B. and BUTLER-JONES, F. *What industry owes to chemical science.* (New York: Van Nostrand. 1918. Pp. 164. $1.50.)

SMITH, E. A. *The zinc industry.* Monographs on industrial chemistry. (New York: Longmans. 1918. Pp. 223. $3.50.)

Transportation and Communication

The Atlantic Port Differentials. By JOHN B. DAISH. (Washington: W. H. Lowdermilk. 1918. Pp. xix, 524.)

Ports and Terminal Facilities. By ROY S. MACELWEE. (New York: McGraw-Hill Book Co. 1918. Pp. ix, 315. $3.00.)

Atlantic Port Differentials is a compilation of important reports and official documents on the adjustment of freight rates between the interior and the North Atlantic ports. The author states that he has not been unmindful of the fact that on several occasions he represented as attorney one of the ports vitally interested in the subject of Atlantic port differentials and on other occasions interests subject to freight rates based on differentials; that he had reason, therefore, to avoid the insertion in this work of his personal views or of any biased excerpts from documents; that such a method necessitated the printing of documents in full "except where matter occurs wholly irrelevant to the subject."

The volume contains five important early documents as follows: (1) *The Differential Rate Agreement of April 5, 1877*, entered into by the New York Central and Hudson River Railroad, the Erie, the Pennsylvania, and the Baltimore and Ohio Railroad; (2) the *Report Upon the Adjustment of Railroad Transportation Rates to the Seaboard*, by Albert Fink, 1881; (3) *The Preamble and Resolutions of Trunk Lines Executive Committee*, appointing the Thurman-Washburne-Cooley Commission, January, 1882; (4) the *Report of the Thurman-Washburne-Cooley Commission*, July, 1882; (5) part of the *First Annual Report of the Internal Commerce of the United States* (in the appendix), by Joseph Nimmo, Jr. There are included in the compilation fourteen decisions of the Interstate Commerce Commission. These

decisions and supplemental decisions cover the period from 1887 to 1913. (One of the cases is incorrectly given in the text, page 233, as having been decided in 1889 instead of 1899). A memorandum of the auditor of the Interstate Commerce Commission of May 12, 1904 gives *Differential Rates to and from North Atlantic Ports.* A statement issued by the Interstate Commerce Commission in January, 1915 (in appendix), following its report on the supplemental hearing in the five per cent cases, gives the *Inter and Intra-territorial Bases of Rates in Official Classification and New England Territories.* There is a brief introduction by the author, a table of cases reported and cited, and a good index. The introduction leaves much to be desired. In view of this fact, the volume would have been improved if Nimmo's report had been given at the beginning of the volume instead of in the appendix.

The author has performed a valuable service in bringing together the cases bearing upon a subject which is destined to play an important rôle in future rate adjustments. Two months after he had written the foreword to this volume the Interstate Commerce Commission again raised the subject of Atlantic port differentials, in the important New York Harbor case (47 I. C. C. 643).

There are three outstanding features in MacElwee's *Ports and Terminal Facilities.* First, the physical features and problems connected with ports and terminal facilities are discussed in chapters II, and VIII to XIV inclusive. Chapter II treats of the general importance and physical characteristics of the world's important ports. Maps are given representing the proper layout for a port. Chapters VIII to XIV inclusive are concerned with piers, wharves, quays, wharf equipment, cargo and transfer handling, shed equipment, the warehouse and mechanical devices in the handling of both bulk cargo and standard package or specialized freight. Criticism is made of piers and wharves as they are found in many ports and suggestions are made as to possible improvements in their construction. The author maintains that the pier construction at Philadelphia is much superior to that of New York. He states that the collapse of American ports has been due, in large measure, to inadequate storage and warehouse facilities. Not enough traffic is absorbed to eliminate the evils which come from the irregularity with which traffic arrives at a port. It is shown that storage sheds so constructed as to give room for

handling demurrage freight and to care temporarily for freight intended for storage are necessary concomitants to any adequate warehouse system. Emphasis is rightly placed upon having vessels provided with mechanical appliances to coördinate with shore equipment in the expeditious and economical handling of cargo. It was pointed out in the Cresson report to the dock commissioner of New York harbor in 1913 that the question of economical handling of cargo has not received the attention it deserves.

A second feature of the volume is the discussion of some of the problems which are involved in a properly unified port and in a proper coördination of rail and water carriers. Chapter III is concerned with the general characteristics of a well coördinated port; chapters V, VI, and VII with the harbor belt-line railway and competition at the terminals including lighterage and drayage; chapter XVI with the industrial harbor and upland development; chapter IV with port competition for rail and maritime freight; chapter XV with inland waterways and the seaport. The time is opportune for the emphasis which the author gives to the need of a proper coördination of port facilities. He indicates that although New York is far from ideal as a port it has grown because of the freedom with which traffic can be moved from railroads to warehouses and piers or vice versa, being accomplished by lighterage. Where lighterage is not possible this coördination must be made by a belt-line railway which the author shows has not been properly worked out in our important ports and terminals. Private ownership and competition are correctly held to be responsible for much of the lack of coördination in terminal facilities. The lack of coördination in the use of the belt-line principle is shown to be the cause for much unnecessary drayage and congestion in city streets. Much could be gained by unification of all port facilities including the cartage of freight. The plan of coördination proposed includes a recognition of the industrial and commercial functions of a port. The significance of these functions was indicated in a report of the Bureau of Corporations on *Water Terminals* in 1910. It is pointed out in *Ports and Terminal Facilities* that in America there has been little appreciation of this fundamental feature of port organization and it is urged that we pattern after European ports along this line. It is contended that the proper coördination of the industrial and commercial functions of a port has an important influence upon the

primary and secondary industries which will develop at a port and that these in turn, through the load factor, are significant in the competition of ports for both rail and marine freight; that those ports will be sought which are most likely to provide a full cargo in both directions. The author sees a bright future for inland waterways partly because he believes railroads will not oppose their development as they did when railways were in excess of the needs of the country and there was fierce competition for traffic.

The third feature of the book (chapters XVII and XVIII) is a discussion of the free port as an institution and the process by which the free ports of Hamburg and Bremen were created. In the discussion of the free port, it is shown that our bonded warehouse is the same in principle as the free port, but without the advantages which the organization of a free port would bring. Among these advantages it is claimed that the free port would enable us to compete with the rest of the world in ship building, and would provide a world market for our war-stimulated industries with the return of peace.

Much valuable information has been brought together in this volume, but as analysis of its contents indicates, it has not been well coördinated; nor has a satisfactory treatment of many port and terminal problems been possible within the compass of the present volume. The author himself appreciates this. He states in his preface that a call to national service made it necessary for him to prepare "for the printer in weeks where months were considered too little" (p. viii), and he promises that many important problems of ports and terminal facilities, not included in the present work, will be treated in a possible second volume. The study is a significant contribution and it has become available at a time when it will be of distinct service.

C. O. Ruggles.

Ohio State University.

NEW BOOKS

Bradlee, F. B. C. *Boston and Lowell railroad, the Nashua and Lowell railroad, and the Salem and Lowell railroad.* (Salem, Mass.: Essex Institute. 1918. Pp. 64. $2.)

Haines, H. S. *Efficient railway operation.* (New York: Macmillan. 1918.)

Richey, A. S. *Traffic operation. Springfield Street Railway Company, Springfield, Mass.* (Worcester, Mass.: The author. 1917. Pp. 117.)

THOMPSON, S. *Railway statistics of the United States of America for the year ended December 31, 1917, compared with the official reports for 1916 and recent statistics of foreign railroads.* Fifteenth year. (Chicago: Bureau of Railway News and Statistics. 1918. Pp. 128.)

Eighth annual report of the statistics of express companies in the United States for the year ended December 31, 1917. (Washington: Interstate Commerce Commission, Bureau of Statistics, Division of Publication. 1918. Pp. 21.)

Le porte de Cette. (Lyon: Imprimerie A. Rey, 4 rue Gentil. 1918. Pp. 78.)

Trade, Commerce, and Commercial Crises

NEW BOOKS

BENN, F. J. P. *Trade parliaments and their work.* (London: Misbel & Co., 22 Bernes St. 1918.)

CHADWICK, D. T. and BLACK, G. W. *Report on Indo-Russian trade.* (Simla: The authors. 1918.)

CULBERTSON, W. S. *Commercial policy in wartime and after.* (New York: Appleton. 1918.)

GUYOT, Y. and others. *Le libre échange international. Six conférences organisées en 1918 par la Ligue du Libre- Echange à l'Ecole des Hautes-Etudes Sociales.* (Paris: Alcan. 1918. 2.20 fr.)

HAUSER, H. *Germany's commercial grip on the world. Her business methods explained.* Translated from the third French edition by MANFRED EMANUEL. (New York: Scribners. 1917. Pp. xv, 259. $1.50.)

It is with distinct pleasure that the writer has read this work upon Germany's business methods by a French university professor. The evident familiarity with the subjects of which he treats, the references to authorities (even though frequently secondary), the general soberness of tone in spite of occasional exaggeration, constitute a striking contrast to much that has appeared on German business methods, both before and since the opening of the war.

After a sketch of Germany's development and a chapter upon the necessity for expansion, M. Hauser examines the principal factors of the expansion under four headings: Banks and Credit; Cartels and Dumping; Means of Transportation; and the Role of the State. Under Banks and Credit is emphasized in particular the medley of functions of German banks, the participation of banks in trade and industry, and their active encouragement of foreign trade through the establishment of foreign agencies, foreign branches and connections, and through foreign investment. In dealing with cartels the author's opinion seems to be borne out by facts. Unlike a number who have written upon the subject, he seems to appreciate the fact

that the consistent policy of dumping practiced by certain cartels is made possible only by higher than normal prices secured for goods sold upon the domestic market. With regard to transportation, the exceptional railways tariffs and the part played by waterways come in for considerable attention. Further, the indirect subsidy paid to the mercantile marine by these tariffs and by protected immigration is exposed. In discussing the state, the attitude of the government toward cartels and the blending of imperialist policies and aspirations with commerce are clearly shown.

Part three of the book, entitled The Conquest of Markets, describes the systematic study of markets and the technique of foreign trade by those having to do with export trade; commercial penetration of foreign markets through commercial travelers, export houses, and various media of publicity; finally, industrial penetration through the investment of capital, the creation of reciprocal demand and the establishment of factors and German industries in foreign lands.

Without indiscriminately praising German methods, M. Hauser points out the lessons which may be learned from Germany, both as to features that deserve imitation and features that should not be copied. Asserting that "to boycott Germany is a dream," he urges greater coöperation among business men and among nations in order that France and other countries may secure the desired commercial development.

HARRY R. TOSDAL.

HUBERICH, C. H. *The law relating to trade with the enemy together with a consideration of the civil rights and disabilities of alien enemies and of the effect of war on contracts with alien enemies.* (New York: Baker, Voorhis & Co. 1918. Pp. xxxii, 485.)

HUEBNER, G. G. *Agricultural commerce.* (New York: Appleton. 1918. $2.40.)

HUXLEY, L. *Commercial policy in war time and after.* (New York: Appleton. 1918.)

KOEBEL, W. H. *South America: an industrial and commercial field.* (London: Unwin. 1918. 18s.)

VAN PESKI, V. and NYTTENBOGAART, D. L. *Le marché des céréales de Rotterdam.* (Rome: Inst. Intern. Agr. Pp. 83.)

POTTS, R. C. *Marketing practices of Wisconsin and Minnesota creameries.* Dept. bull. 690. (Washington: Dept. Agr. 1918. Pp. 15. 5c.)

PULSFORD, E. *Commerce and the empire, 1914 and after.* (London: King. 1917. Pp. x, 248. 7s. 6d.)

RAFFALOVICH, A., editor. *Russia: its trade and commerce.* (London: King. 1918. 12s. 6d.)

SAUNDERS, E. *A self-supporting empire.* (London: Nisbet & Co. 1918. Pp. 203. 3s. 6d.)

VEDDER, G. C. *American methods in foreign trade.* (New York: McGraw-Hill. 1918. Pp. 200. $2.)
To be reviewed.

WEBSTER, W. C. *A general history of commerce.* (Boston: Ginn. 1918. Pp. 453.)

Economy in retail service. Experience of stores in which readjustments to war conditions have been made. (Washington: Council National Defense. 1918.)

Foreign trade thought of 1918. Excerpts from addresses delivered at the fifth national foreign trade convention. (New York: Irving National Bank. 1918. Pp. 75.)

Official report of the fifth national foreign trade convention, held in April, 1918. (New York: National Foreign Trade Convention Headquarters. 1918. Pp. xxx, 667.)

Retail selling. Commercial education series no. 1. (Washington: Federal Board for Vocational Education. 1918. Pp. 93.)

The traffic library. Express and parcel post services. (Chicago: Am. Commerce Assoc. 1918. Pp. xvi, 625.)

United States food administration laws and rulings. (Chicago: Commerce Clearing House. 1918. Pp. 251.)

Accounting, Business Methods, Investments, and the Exchanges

Valuation and Rate-Making. The Conflicting Theories of the Wisconsin Railroad Commission, 1905-1907. By ROBERT L. HALE. Columbia University Studies in Political Science, Vol. LXXX, No. 1. (New York: Longmans, Green and Company. 1918. Pp. 156. $1.50.)

It is difficult to determine whether the author of this book intended to confine his discussion to the conflicting valuation theories of the Wisconsin Railroad Commission or whether his purpose was to convey a "revised" principle of utility valuation. The subject-matter discussed covers within its scope such wide and confused problems that the book resembles a legal commentary on utility valuations rather than an economic monograph. The first chapter, dealing with the United States Supreme Court valuation decisions, is too brief and discursive to assist toward a full understanding of the subsequent chapters. Moreover, the relationship between the Wisconsin commission's theories and the Supreme Court decisions is not always clearly pointed out. Dr. Hale succeeds very well, however, in presenting the conflicting and contradictory character of the numerous valuation cases decided

by the Wisconsin Railroad Commission since 1905. This is not an easy task since the material must be drawn from all sorts of utility controversies ranging from reasonableness of railroad passenger fares to the fixing of the value of "indeterminate permits in cases involving municipal purchases."

It is to be expected that the Wisconsin commission's viewpoint should change in accordance with the nature of the individual cases brought to it for decision. Dr. Hale rightfully contends, however, that in adopting a new theory or in casting about for an old one, the commission frequently "does so without stating the grounds of its choice." Furthermore, "when expressing grounds of policy, the commission is not always consistent." Some of these inconsistencies the author endeavors to explain. His discussion is confined mainly to the problems of "fair value" and "reasonable return." As a "fair value" basis the Wisconsin commission has at times adopted the replacement cost of physical property. It has therefore excluded "intangibles" and abandoned or unused property. All this would seem to point to a complete rejection of "exchange value" as a basis for computing reasonable rates. However, following the Supreme Court decision in *Smyth* vs. *Ames*, the Wisconsin commission has at times adhered to the "composite value" theory, which retains many of the elements that enter into the exchange value of properties.

In enumerating theories of "fair return," there are cases where the commission seeks to allow only what is necessary to secure the service: there are others where it thinks the owners entitled on an analogy of private ownership to the unearned increment (p. 141). These conflicting opinions, according to Dr. Hale, point to the need of a revised principle of utility valuation. The so-called "incentive theory," which would restrict utility earnings to a rate merely sufficient to attract capital investment in utility properties, is analyzed in some detail, but it is not entirely clear from Dr. Hale's text whether he indorses this theory and believes in its practical application.

A. M. SAKOLSKI.

Hiring the Worker. By ROY WILLMARTH KELLY. (New York: Engineering Magazine Company. 1918. Pp. vii, 250. $3.00.)

The Taylor System in Franklin Management; Application and Results. By GEORGE D. BABCOCK. (New York: Engineering Magazine Company. 1917. Pp. xx, 245. $3.00.)

Scientific Industrial Efficiency. By Dwight T. Farnham. (Chicago: Kenfield-Leach Company. 1917. Pp. 101.)

Buying Brains. Facts and Suggestions regarding the Establishing of Better Relations between Employers and Employees. (New York: Authors Press. 1918. Pp. 229. $2.00.)

The Works Manager Today. By Sidney Webb. (London: Longmans, Green and Company. 1917. Pp. 162. $1.00.)

In *Hiring the Worker* Mr. Kelly lays before his readers the results of a survey of the employment and service functions in thirty firms. He takes the position of the impartial investigator, presenting the data concisely and without prejudice, and gives the reader the opportunity to profit from the experiences of these organizations and to learn of the procedures developed within these industrial laboratories. The survey is described and an idea of the form of the organizations included is given. The employment manager and his duties, the employment department, its cost of maintenance, job analysis, and employee selection occupy the early chapters. Methods of employee placement and training in several different organizations are considered and the technique of transfer, promotion, and discharge is discussed. A number of examples of forms, records, and booklets, and a bibliography of employment management concludes the treatment.

The book awakens a keener appreciation of the breadth of the field of effort along the lines of employee relationships within the industry and should be of value to any one who wishes assistance in solving the practical problems which arise in the development of functionalized departments.

Rarely has an exposition of scientific principles been developed through the medium of narrative. Major Babcock in his discussion of *The Taylor System in Franklin Management* has achieved a singular degree of success through this avenue of expression. The industrial administrator finds in this method of presentation a strong appeal; for in place of the abstruse conclusions of the business theorist he reads the simple story of an application of the scientific method of management to a well known industrial organization, and he is constantly cheered by the realization that he is not reading of visionary industrial milleniums but of a manufacturing policy and procedure which have withstood all of the practical working difficulties for which he has a keen appreciation.

The opening chapters tell us of conditions in the Franklin plant before the introduction of the system; of the opening correspon-

dence with Dr. Taylor and Mr. Carl S. Barth; of the investigation of existing examples of the system; and of the final decision to attempt the installation. We then catch glimpses of the preliminary work in the plant, of the classifications which were made, of the standards which were set, and finally of the mechanisms of production control which, as developed here, constitute a lasting contribution to applied industrial science. Employment and rate fixing show a high degree of operating technique; and the introduction of such factors as years of service, absence and tardiness, cost of living, coöperation, and conduct into the formula for wage rate determination reflects the degree to which the human element was taken into consideration in the development of the wage payment plan. The effect of the new methods upon the functions of inspections, stores, purchasing, and its reaction upon the employees is discussed. In the closing chapter the results of the installation are made readily appreciable through the medium of several excellent charts.

To the modern administrator whose basic interest, behind a screen of attentiveness to systems and mechanisms, is in the study and resulting understanding of the men of his executive personnel, the book brings an unexpected and gratifying return, for between the lines he will sense the character of the writer, the breadth of vision, the high standards of achievement, the resoluteness of purpose with which the problem was approached, and he may find himself doubting if any venture could fail under the guidance of such a personality. The book brings faith to the unbeliever and courage to him who is facing the ever-present difficulties with which the paths of industrial progress are strewn.

Mr. Farnham's book is a description of the fundamental principles of scientific management and their bearing upon the manufacture of brick and other clay products. It has particular interest for those who are familiar with kiln processes. Many concrete examples of management methods and policies are cited and afford a valuable background for the reflection of the principles under discussion. The subject-matter, presented in simple and forceful manner, covers analytical time study, centralized control, planning and scheduling, standardized technical control, aids to management, principles and results.

Buying Brains is a somewhat superficial and generalized ex-

position of certain industrial activities including scientific management, employment, employee instructions and development, compensation, profit sharing, trade unions, coöperative policies and the elimination of wastes.

The trend of industrial administration in England is admirably indicated by Professor Webb in *The Works Manager Today*, which is the publication of an address prepared for a series of private gatherings of works managers. The discussion involves the function of management, reduction of production cost, appointments and dismissals, standardization of trade rates, wage systems, administrative technique (naïvely called "manners of management"), discipline, fatigue and accidents, scientific management, and welfare work.

Erwin H. Schell.

Massachusetts Institute of Technology.

NEW BOOKS

Aiken, C. R. *The millinery department.* (New York: Ronald Press. 1918. Pp. xix, 175.)

Basset, W. R. *Accounting as an aid to business profits.* (Chicago: A. W. Shaw Co. 1918. Pp. 544. $5.)

Bolles, A. S. *Business man's commercial law library.* (Garden City, N. Y.: Doubleday, Page. 1918.)

Browder, E. *An accounting system for a coöperative store.* (New York: Coöperative League of America, 2 West 13th St. 1918. Pp. 16. 5c.)

Cohen, J. H. *Commercial arbitration and the law.* (New York: Appleton. 1918. Pp. xx, 339. $3.)

Douglas, A. W. *Merchandising.* (New York: Macmillan. 1918. Pp. 151. $1.)

Farrington, F. *The successful salesman.* (Chicago: Laird & Lee. 1918. Pp. 208. $1.)

Fertig, J. H. *A compilation of the laws relating to trades, occupations, and professions.* Bull. no. 18. (Harrisburg, Pa.: Legislative Reference Bureau. 1918. Pp. 347.)

Fitch, J. K. *The Fitch bond book, describing all important corporation and railroad bond issues of the United States and Canada.* 1918 edition. (New York: Fitch Pub. Co. 1918.)

Funk, W. C. *Farm household accounts.* Farmers' bull. 964. (Washington: Dept. Agriculture. 1918. Pp. 11.)

GERSTENBERG, C. W. *Principles of business.* (New York: Prentice-Hall. 1918. Pp. xiv, 821. $3.)

To be reviewed.

GOFF, W. L. and SCOTT, W. S. *High income bond values covering yields from 6 to 15 per cent, payable semi-annually.* (Boston: Finan. Pub. Co. 1918. 44 tables. $3.40.)

GOWIN, E. B. *The selection and training of the business executive.* (New York: Macmillan. 1918. $2.)

HAUER, D. J. *Modern management applied to construction.* (New York: McGraw Hill. 1918. Pp. 194. $2.50.)

HENDERSCHOTT, F. C. and WEAKLY, F. E. *The employment department and employee relations.* (Chicago: LaSalle Exten. Univ. 1918. Pp. 60.)

JONES, F. D. and HAMMOND, E. K. *Shop management and systems.* (New York: Industrial Press. 1918. Pp. x, 307. $2.50.)

KENT, W. *Bookkeeping and cost accounting for factories.* (New York: Wiley. 1918. Pp. vii, 261. $4.)

The author has undertaken to prepare "a systematic treatise on cost accounting which will start the student at the beginning with the elementary principles of double entry bookkeeping and lead him through factory accounting to cost accounting, giving him not only the fundamental theory in accordance with the views of the ablest modern accountants, but also warning him against time-worn fallacies of the older school."

The first five chapters deal with elementary principles: titles and definitions of accounts; the evolution of modern labor-saving devices in bookkeeping; the Federal Trade Commission's system of accounts for retail merchants; and factory accounting as distinct from commercial bookkeeping. Cost accounting is taken up specifically beginning with the sixth chapter and the author "divorces the accounting department from the cost department having the latter determine costs by an independent method." "A new definition of factory cost is now needed. It is not post-mortem cost, what the goods cost last year, but what it will now cost to reproduce them or what they will probably cost during the remainder of the current year, assuming that the factory runs at its normal rate." A long chapter is devoted to distribution of burden. The machine-hour rate is considered by the author as the basis of the best system for factories manufacturing "assembled" product and he shows how certain modifications of it may make the cost figures more accurate than the ordinary results.

The particular merit of the book lies in the last half which is devoted almost entirely to practical cost accounting in specific industries, including a blast furnace, a steel works, foundries, a hardware factory, a machine shop, a bakery, a textile mill, a woodworking shop, power plants, and printing shops.

The student and accountant will find this treatise an invaluable handbook of useful and stimulating information. However, in the classroom it can be used advantageously as an elementary text only when supplementing a book which acquaints the student with the simpler aspects of the subject. M. J. S.

LEHMAN, M. A. *The glassware department.* (New York: Ronald Press Co. 1918. Pp. xv, 161.)

LILLY, W. *Individual and corporation mortgages. A statement for laymen of the legal principles.* (New York: Doubleday, Page & Co. for the Investment Bankers Assoc. of Am. 1918. Pp. 153. $1.) To be reviewed.

LOWNHAUPT, F. *How to select investments.* (New York: Mag. Wall St. 1918. Pp. 148.)

MOTT, H. S. *The course of bond prices. A comparison with Civil War conditions.* (New York: Irving Nat. Bank. 1918. Pp. 16.)

NÉGRIER, P. *Organisation technique et commercial des usines d'après les methodes américaines (système Taylor).* (Paris: Dunod & Pinat. 1918.)

NELSON, G. N. *Income tax law and accounting, 1918.* (New York: Macmillan. 1918. $2.50.)

PATON, W. A. and STEVENSON, R. A. *Principles of accounting.* (New York: Macmillan. 1918.)

POMEROY, R. W. *Bond investments: a complete list of suitable bond investments with memoranda in support of their classification.* (Buffalo, N. Y.: Conner & Co., 246 Michigan St. 1918. $5.)

PRICE, I. *Questions in advanced bookkeeping for drill, test and review.* (New York: Hinds, Hayden & Eldredge. 1918. Pp. 80. 30c.)

RITTENHOUSE, C. F. *Elements of accounts for individuals, professional men and institutions.* (New York: McGraw-Hill. 1918. Pp. xii, 264. $2.)

ROSS, W. J. *Price reports, the reporting plan; the constitution and by-laws.* (Utica, N. Y.: Knit Goods Mfrs. of America. 1918. Pp. 61.)

ROLLINS, M. *Municipal and corporation bonds. Terms, customs, and usages. A reference book for the investor and banker.* Revised edition by BENJAMIN FISHER. (Boston: Finan. Pub. Co. 1918. Pp. 202. 85c.)

SCHOCH, P. and GROSS, M. *Elements of business.* (New York: Am. Bk. Co. 1918. Pp. 216.)

SISSON, F. H. *The effect of the war on railroad securities.* (New York: Guaranty Trust Co. 1918. Pp. 8.)

STRAYER, S. I. and WRIGHT, H. W. *Modern bookkeeping, accounting*

and business practice. (Philadelphia: Modern Textbook Co. 1918. Pp. 258.)

Thompson, E. B. *The silk department.* Department store merchandise manuals, vol. 9. (New York: Ronald. 1918. Pp. xx, 224.)

Twyford, H. B. *Storing; its economic aspects and proper methods.* (New York: Van Nostrand. 1918. Pp. 200. $3.)

Wang, C. C. *Legislative regulation of railway finance in England.* (Urbana, Ill.: Univ. Illinois. 1918. Pp. 196. $1.50.)

Accounting system for the United States Indian Service. (Washington: Dept. Interior, Office of Indian Affairs. 1917. Pp. 191.)

The Merchants' Association of New York. Year book 1918. (New York: The Association, Woolworth Bldg. 1918. Pp. 288.)

Public utilities. (Wellesley Hills, Mass.: Babson Statistical Organization. 1918.)

The war's effect on copper, silver, railroad and industrial stocks. (Boston: G. F. Redmond & Co. 1918. Wall chart 6 by 2 ft.)

The 100 best investments. (London: British, Foreign & Colonial Corporation, Ltd. 1918. 1s.)

Labor and Labor Organizations

Profit Sharing. Its Principles and Practice. A Collaboration by Arthur W. Burritt, Henry S. Dennison, Edwin F. Gay, Ralph E. Heilman, and Henry P. Kendall. (New York: Harper and Brothers. 1918. Pp. x, 328. $2.50.)

In arriving at their conclusions in regard to profit sharing, the authors state that a critical study and analysis of the methods of a large number of employers have been made, that a considerable number of plants having profit-sharing schemes have been investigated at first hand, that large correspondence has been carried on, and that many employers and employees have been interviewed.

The collaborators have convinced themselves that under right conditions the participation of employees in the profits of a business will stimulate effort and increase personal efficiency, especially of members of the managerial groups and salaried workers in posts of responsibility; that profit sharing promotes organization fitness; tends to increase the permanence of a business by increasing continuance of high grade management, thus developing and maintaining the quality fact in the labor force which in turn protects the reward upon invested capital; that, though not the most important, profit sharing is nevertheless a helpful means

of reducing the labor turnover by securing permanence of service; that when carefully guarded so as not to limit freedom of occupational choice, which is a chief goal of society, profit sharing is an important agency for the promotion of industrial peace.

The task undertaken is an ambitious one, the method and purpose most promising, and it is a marked achievement in economic and business literature that the five authors are in substantial agreement as to their conclusions.

The analysis has been essentially confined to the discussion of fundamental principles and methods of applying the profit-sharing principle, leaving to each business, in the light of its own needs, the working out of all such details as the amounts of profits to be decided, the groups eligible to share in profits, what the basis of payment shall be, whether the scheme shall be a general, departmental, or unit payment plan, frequency of distributing profits, whether payment shall be in cash or stock, etc.; and has relied upon the valuable American and British government documents on the same subject to furnish detailed statistical matter.

The authors have clearly recognized the vital relations between profit sharing and other crucial aspects of functional, personnel administration. They wisely stress the fact that profit sharing cannot do many important things. It cannot, for example, be a substitute for good management; it cannot successfully establish any self-operating mechanism in business divorced from the necessary high qualities of personality which constitute the successful business administrator—constructive imagination, enlightened judgment, true courage, inspiring energy, enthusiasm, sincerity, loyalty, a genuine spirit of coöperation, a lofty conscience.

A thoroughgoing audit of corporation management is needed before profit sharing can be wisely introduced. It is an unwholesome business procedure to add profit sharing to a business where basic standards of wages and working conditions are not maintained, where workers have not been carefully selected and adapted to their tasks, where job and organization instruction and training are inadequate or lacking, hours of work too long, systems of transfer and promotion undeveloped, and where no open channels for the expression of grievances exist.

Since too often employers have definitely regarded profit sharing as a substitute for an adequate wage, the authors have been wise in calling attention to the fact that they have considered profit sharing upon the assumption of the continued existence of

our present economic system and its wage payment methods, and that profit sharing must be regarded as merely having a rightful place within the wage system, in no sense a substitute for it.

A definite contribution to a more wholesome solution of the problem of incentives and rewards, which is now so generally occupying the attention of the business world, is expressed in the following paragraph, (p. 74): "The outstanding fact tacitly recognized in all these plans is that long service is something that the employer is not entitled to expect in return for the regular market wage. It is something of special value over and above the day's work and to obtain it the employer expects to make an exceptional payment for it."

A fundamental criticism of profit sharing raises grave questions now confronting the business world. The reviewer would like to stress the following: How can employees have complete confidence in any profit-sharing scheme until they are convinced that manufacturers know their actual cost of production? In announcing that only ten per cent of the manufacturers in the United States know their actual cost of production, the Federal Trade Commission gave students of profit sharing and economic justice something to think about. Here is a vital problem involving the analysis and just apportionment of overhead expenses which leads to fundamental questions of economic and social justice. Idle workmen are not paid wages. Why should capital invested in idle machinery be remunerated? Profit is very materially influenced by the overhead. The cost of *maintaining* an organization is a complicated matter. Overhead expenses often involve the largest waste in production. Too frequently these wastes result from faulty organization—lack of foresight in purchasing material, defective routing, antiquated or idle machinery, inefficient maintenance, delays due to the lack of clear or duplicated instructions from the office or department heads, etc. Are these not matters vitally affecting profits and is it not the right of profit sharers to know all about them?

Further, must not the facts for an intelligent understanding of any incentive or payment plan comprehend a true knowledge of the state of demand for the product, the wages in the community and in the industry under consideration, the amount and standards of output, the cost of living, the hazards of the job, the amount of previous education necessary for the work, the amount of continued instruction necessary to carry on the work with cumula-

tive efficiency, the amount of waste involved, the length of service, the regularity of attendance, the possibilities of promotion, the actual profits of the business, the methods employed of providing for plant extension, depreciation, reserves, disposition of surplus, and the company policy as to minimum and maximum salaries in the organization? And must not all this vital data be jointly collected, appraised, and agreed to, before we can hope to have any very satisfactory or widely accepted profit-sharing schemes? Genuine profit-sharing plans must embody guarantees of their terms in writing clearly understood by all before they are undertaken. There must be full knowledge and publicity of accounts—at least easy access to the books by outside accountants. There must be a fixed rate of dividends and an agreed upon ratio of basic pay for head and hand workers; the setting forth of a statement of the complete terms upon which a business is conducted, the amount of profits set aside, the rate of dividend, the rate to be written off for depreciation, and a clear agreement in advance that the employer will, if there is a profit, divide it with the employees on such and such an agreed basis.

Although not called upon to treat the problems of management sharing in any detail, our authors clearly recognize, in their illuminating chapter on Profit Sharing to Promote the Spirit of Coöperation, the close interrelations between profit sharing and some well worked out plan of group participation and functional management. Especially is this true if profit sharing is to be a real help in developing coöperation in the managerial groups. This chapter is a real contribution to the much discussed problem of a joint administrative control now agitating the business world.

As indicated on pages 156-157 the authors further recognize the clear relations between profit sharing and management sharing, but they do not bring out the vital fact that in order to secure the complete confidence of employees in profit-sharing schemes the workers must share in their administration. Joint control over the many complicated phases of personnel administration bristles with difficulties, but this is no reason for dodging the issue; and the trite saying, so common among employers, that employees are not prepared for or in any considerable numbers desirous of assuming the burdens of management sharing, does not reflect a constructive attitude of mind. Until employees have a share in the administration of those problems directly affecting their own personal welfare, are employers justified in asking their workers to share losses?

In opening up the important question as to what extent should a company introducing profit sharing provide for giving to its employees the facts regarding financial operations, such as investments, earnings, total or departmental profits, the only answer satisfactory to the reviewer is, to the fullest extent necessary to enlighten and convince the employees what all the vital facts are that directly or indirectly influence profits. Such enlightenment and conviction can come only as a result of the employees having had a share in the collection, evaluation, and publicity of the essential facts.

The questions raised are in no way intended as an adverse criticism of the book under review. The work is unquestionably trustworthy in all vital particulars. Its constructive criticism of a method of income distribution—its philosophy, interpretation, limitations—is at a time like this, when employers are clamoring for help, most salutary. The book is a wholesome model of what constructive propaganda among employers should be.

HENRY C. METCALF.

NEW BOOKS

BENTINCK, H. *Industrial fatigue and the relation between hours of work and output, with a memorandum on sickness.* (London: King. 1918. Pp. 43. 6d.)

COLE, G. D. H. *An introduction to trade unionism.* (London: Allen & Unwin. 1918. 2s. 8d.)

COLE, G. D. H. *Labour in the commonwealth.* (London: Headley Bros. 1918. 5s. 6d.)

COLE, G. D. H. and MELLAR, W. *The meaning of industrial freedom.* (London: Allen and Unwin. 1918. Pp. 46. 1s.)

COLE, G. D. H. *The payment of wages. A study in payment by results under the wage-system.* (London: Allen & Unwin. 1918. 6s.)

COLLIER, D. J. *The girl in industry.* (London: G. Bell & Sons. 1918. Pp. 56. 9d.)

CROSS, I. B. *Collective bargaining and trade agreements in the brewery, metal, teaming and building trades of San Francisco, California.* University of California publications in economics, vol. 4. (Berkeley: Univ. California Press. 1918. Pp. 233-364. 30c.)

This monograph is largely the result of investigations made by the author for the United States Commission on Industrial Relations. Its publication is another evidence that the niggardliness of

Congress has not prevented the presentation of the most useful parts of the commission's work.

Professor Cross deals comparatively little with the historical development of collective bargaining and trade agreements in San Francisco. Most of his material is concerned with the unions, the employers' associations, and the conditions of employment as they obtained in 1915. Discussing the first three trades named in the title, the author outlines the different items covered by agreements, such as those relating to wages, hours, the closed shop, the union label, the restriction of output, and conciliation and arbitration. This enumeration, however, is not found necessary for the building trades for the reason that the building trades unions, generally speaking, had not developed the agreement type of mind by 1915 but preferred to force their terms upon employers without waiting for conferences or formal understandings. In contrast to the building trades it is pointed out that the brewery workmen, who were organized fully as well as the former, willingly entered into contracts with the employing interests. The best example of collective bargaining in the city appeared to be represented in the metal trades where the opposing parties were fairly equal in strength, thus making it impossible for one side to dictate terms to the other. In the teaming trades the degree with which collective bargaining was carried on with success varied with the different types of teamsters and their employers.

The main conclusion of the study is that collective bargaining down to 1915 had been a success in San Francisco and that the policy of trade agreements should be upheld generally. This conclusion and other minor ones, however, the author has not supported by analysis and argument as fully as he might have done. The best feature of the monograph is its presentation of the actual terms of agreement obtaining in typical trades in a strong closed-shop center. Such data as this will be of assistance some day when a comprehensive treatise is prepared on collective bargaining in America.

A directory of the San Francisco unions affiliated with the labor council of that city, a schedule of wages and hours prevailing in the city for May, 1915, a brief note on the local settlement of jurisdictional disputes, and copies of three local agreements are given in appendices.

Frank T. Stockton.

Earnshaw-Cooper, W. *British industries after the war. I. The hand industry.* (London: Central Committee for National Patriotic Organizations, 62 Charing Cross. 1918. Pp. 52. 3d.)

Grant, P. S. *Fair play for the workers; some sides of their maladjustment and the causes.* (New York: Moffat, Yard. 1918. Pp. 368. $1.60.)

Harris, L. I. and Swartz, N. *The cost of clean clothes in terms of health.* (New York: Department of Health. 1918. Pp. 96.)

Dr. Harris represents the Department of Health of New York City and Miss Swartz is executive secretary of the Consumers'

League of New York. They were assisted by nine investigators. The study describes the conditions of work in laundries: hours, wages, working force, and relation of work to health. Wherever possible the data are summarized in statistical tables. Need is shown for minimum wage legislation in this industry.

HART, H. *Fluctuations in unemployment in cities of the United States, 1902-1917.* Studies from the Helen S. Trounstine Foundation, vol. 1, no. 2. (Cincinnati: The Foundation, Neave Bldg. 1918. Pp. 59. 25c.)

The object of this investigation is to determine how much unemployment there has been in occupations other than agricultural in the United States in recent years; the unemployment situation at the close of the war; and the value of remedies proposed for unemployment. Table 1 shows the estimated number of millions of unemployed workers by months, 1902-1917. The largest number unemployed, according to this, was found in January, 1915, numbering six and one half million. The method of arriving at the estimates was to ascertain for each year and month the total number of persons normally occupied in non-agricultural pursuits and to subtract from these "normal supply" figures the estimated "connected demand" for labor consisting of the total number of persons unemployed in non-agricultural pursuits. The "connected" demand was determined by a synthesis of widely scattered information of employment fluctuations. The author does not describe the particular method but in this connection adds, "those who are interested in the details of the statistical method used are invited to address inquiries." Interesting and original diagrams illustrate the results of the statistical investigations.

HENDERSCHOTT, F. C. and WEAKLY, E. *The employment department and employee relations.* (Chicago: LaSalle Exten. Univ. 1918.)

HENDERSON, A. *The aims of labour.* (New York: Huebsch. 1918. Pp. 108.)

HENDERSON, A. *The league of nations and labour.* (London: Oxford Univ. Press. 1918. Pp. 13. 3d.)

HUTCHINS, B. L. *Women in industry after the war.* Social reconstruction pamphlets, no. III. (London: Athenaeum Literature Dept. 1918. Pp. 28.)

KING, W. I. M. *Industry and humanity. A study in the principles underlying industrial reconstruction.* (Boston: Houghton Mifflin. 1918. Pp. xx, 567. $3.)

To be reviewed.

KNOEPPEL, C. E. *Women in industry. An address based on answers to 1,000 questionnaires on women in industry.* (New York: C. E. Knoeppel & Co., 101 Park Ave. 1918. Pp. 123.)

LEE, F. S. *The human machine and industrial efficiency.* (New York: Longmans. 1918. Pp. 119. $1.10.)

To be reviewed.

LÉMONON, E. *L'après-guerre et la main-d'oeuvre italienne en France.* (Paris: Alcan. 1918. 2 fr.)

MANN, A. *Women workers in factories.* (Cincinnati: Consumers' League of Cincinnati. 1918. Pp. 45.)

MAROT, H. *Creative impulse in industry.* (New York: Dutton. 1918. Pp. xxii, 146. $1.50.)

To be reviewed.

MILLS, F. *Labour and economics.* (London: F. Matthews. 1918. Pp. 23. 1s.)

PHILLIPS, M., editor. *Women and the labour party.* By various women writers. (New York: Huebsch. 1918. Pp. 110. 50c.)

The papers included are: The women trade unionists' point of view, by Mary R. Macarthur; The claims of mothers and children, by Margaret L. Davies; The nursery of to-morrow, by Margaret McMillan; The end of the poor law, by Beatrice Webb; Women as brainworkers, by Rebecca West; Women as domestic workers, by Margaret G. Bondfield; The working woman's house, by A. D. S. Furniss; The labour woman's battle with dirt, by Katharine B. Glasier; The woman wage earner, by A. S. Lawrence; and Women and internationalism, by Mary Longman.

RENOLD, C. G. *Workshop committees.* (New York: Survey Associates. 1918.)

A summary of a memorandum prepared for the British Association. Deals with the objects of such committees and types of organization.

ROCKEFELLER, J. D., JR. *Brotherhood of men and nations.* (New York: The author, 26 Broadway. 1918.)

Reprint of an address delivered before the Civic and Commercial Club of Denver, Colorado, June 13, 1918; describes in part the plan of industrial representation which has been established in the Colorado Fuel and Iron Company.

SLICHTER, S. H. *The turnover of factory labor.* (New York: Appleton. 1918.)

TEAD, O. *Instincts in industry. A study of working-class psychology.* (Boston: Houghton Mifflin. 1918. Pp. xv, 221. $1.40.)

TRENT, R. S. *Women in industry.* Bulletin of the Extension Division, Indiana University, vol. III, no. 7. (Bloomington, Ind.: The University. 1918. Pp. 59.)

WATSON, C. H. *The employer, the wage earner, and the law of love.* Hattie Elizabeth Lewis Memorial essays in applied christianity. (Lawrence, Kans.: Univ. Kansas. 1918. Pp. 31.)

WEST, R. *Women and the Labour party.* (New York: Huebsch. 1918.)

WOEHLKE, W. V. *Union labor in peace and war.* (San Francisco: Sunset Pub. Co. 1918. Pp. vii, 141.)

Arbitration and wage-fixing in Australia. Research report no. 10. (Boston: National Industrial Conference Board. Oct., 1918. Pp. 51. $1.)

Control of diseases in establishments for the manufacture and loading of high explosives. Reprints from the Public Health Reports. (Washington: Supt. Docs. 1918.)

The eight-hour day defined. Research report no. 11. (Boston: National Industrial Conference Board. Dec., 1918. Pp. 11. 50c.)

Hiring and firing. Suggestions for employers. Industrial service bulletin no. 1. (New York: Metropolitan Life Ins. Co. 1918. Pp. 48.)

An investigation of the factors concerned in the causation of industrial accidents. Health of munition workers, memorandum no. 21. (London: Ministry of Munitions of War, Welfare and Health Section, 8 Northumberland St. 1918. Pp. 46.)

Labor problems under war conditions; complete report of the proceedings of the national conference held under the auspices of the Western Efficiency Society and the Society of Industrial Engineers, Chicago, March 27-29, 1918. (Chicago: G. C. Dent, Secretary, 327 S. LaSalle St. 1918. Pp. 222. $1.50.)

Labour legislation in Canada as existing December 31, 1915. (Ottawa: Dept. of Labour. 1918. Pp. 740.)

List of organizations affiliated with the American Federation of Labor, national and international, department, state, central and local. (Washington: The Federation. 1918. Pp. 66.)

Proceedings of the sixth annual convention of the Louisiana State Federation of Labor held at Alexandria, Louisiana, April 1-3, 1918. (Shreveport, La.: E. H. Zwally, Secretary. 1918. Pp. 61.)

A questionnaire digest on methods of wage payment. (Chicago: Western Efficiency Society, 327 S. LaSalle St. 1918. Pp. 52.)

A report of the causes of wastage of labour in factories employing women. Medical Research Committee, National Health Insurance, Special Report series no. 16. (London: Wyman. 1918. 1s. 6d.)

"The collected facts show that the general strain of factory life is not borne worse by elder than by younger women, but that when the general wear and tear of factory conditions is combined with physical labor of more than a light or medium degree women over 23 years of age cannot as a whole stand the strain so well as their juniors." In the analysis advanced statistical methods are used.

Report of enquiry made by the Ministry of Labour on the origin, constitution, procedure, and functions of works committees. (London: King. 1918. 6d.)

Report of the nineteenth annual general council meeting of the General Federation of Trade Unions, July 4-5, 1918. (London: The Federation. 1918. Pp. 47.)

Report of the railroad wage commission to the director general of railroads, April 30, 1918. (Washington: Railroad Wage Commission. 1918. Pp. 156.)

The state and industry during the war and after. Reorganization of industry series, IV. (Oxford, Eng.: Ruskin College. 1918. Pp. 84.)

Training and employment in the printing trades. (London: London County Council. 1917. Pp. 49. 1s.)

The Western Union and the War Labor Board. The company's position. (New York: Western Union Tel. Co. 1918. Pp. 40.)

Women workers in the Philadelphia Naval Aircraft Factory. Women in war industries series, no. 4. (Washington: Committee on Women in Industry of the Council of National Defense. Oct., 1918. Pp. 47.)

Money, Prices, Credit, and Banking

Capital Today. A Study of Recent Economic Development. By HERMAN CAHN. Second edition, revised and enlarged. (New York: G. P. Putnam's Sons. 1918. Pp. xii, 376. $2.00.)

The first edition of this book appeared in 1915. Since that time many important and startling economic changes have taken place. These changes necessitated a complete revision. The most emphatic change is in the chapter entitled Money of Account, which has been entirely rewritten and largely expanded. Bank credit money has taken on new significance in the last three years in practically all the important commercial countries of the world. Loans and discounts and note issues have been increasing much faster than deposits and reserves and this fact apparently gives new and cumulative evidence of the main conclusion of the book; namely, that the present capitalistic structure would eventually fall down of its own weight. Because of the great expansion of fictitious capital due to the existence of an enormous increase of bank credit money the social solvency will be seriously endangered. The time is not far distant when people will call for the redemption of money in terms of actual values and when that time comes capitalism will be doomed.

The main hypotheses of the book are socialistic. Emphasis is placed not so much on production as upon the mechanism of exchange. Before the era of capital concentration, which has been the result of the last fifty years of economic development, the formula of the economic cycle was "commodity-money-commodity"; now the formula is "money-commodity-money." The earlier

aim was to make money a mere tool in effecting exchanges, the productive process eventuating in commodities. Now the aim is to make the productive process eventuate in profits, and these profits have tended to center in fewer and fewer hands.

The whole capitalistic system rests upon the very insecure foundation of gold. It is like a huge inverted pyramid. The base, due to the enormous expansion of money of account and the relatively small supply of gold, has become with the years increasingly attenuated. The super-structure is becoming top-heavy and is even now wobbling on its very uncertain foundation. According to the author, time will come when the whole structure will collapse like a house of cards and then will be ushered in the new régime of socialism in which all value will be estimated in terms of labor power, and exchanges will be effected directly through the use of labor tickets which will displace the money of our day.

Capital takes two forms, industrial capital and fictitious capital. Industrial capital is made up of fixed and variable capital. In this grouping are included buildings, machinery, raw materials, and labor power. A large surplus value exists as a result of the productive process. A part of this surplus goes to the capitalist class for consumption purposes, a part goes back into the business, but far the larger part takes the money form which in turn is converted into fictitious capital—stocks, bonds and mortgages, the largest part of which exist by virtue of expected profits. Little or no actual value is thus represented. These expected profits are capitalized and appear in the form of paper evidences, mere legal titles. Through the money power this fictitious capital, represented by bank credit extended to the capitalistic class, is narrowly controlled. In this way the dangerous cycle goes on.

The money system is endangered by the expanding credit facilities of the banks. Money of account becomes of more and more importance. It consists of three categories: namely, savings accounts, profit-made credit money, bank-made credit money. Savings accounts are not the sum of small deposits made by the wage-earning group, as is generally assumed, but deposits in amounts as large as $1,000 made in many savings institutions by a small percentage of the total number of depositors in such institutions. Profit-made credit money consists of deposits of cash made in commercial banks by the industrial class. Bank-made credit money originates out of loans made by the banks to clients against

which checks may be drawn and also from notes issued by banks under the federal reserve law and similar acts. In both cases there is no value back of this money. The whole operation is unsubstantial and insecure. The expansion of credit by banks has become alarming. Reserves are more and more inadequate, so, if the operation continues, the time will come when this process of profit making by banks will lead to a general collapse. Banks will not be able to redeem their promises to pay, social insolvency will ensue, and the whole economic fabric so laboriously built up will come tumbling about our ears.

EVERETT W. GOODHUE.

Colgate University.

Credit of the Nations. A Study of the European War. By J. LAURENCE LAUGHLIN. (New York: Charles Scribner's Sons. 1918. Pp. xii, 406. $3.50.)

The *Credit of the Nations* is an analytical account of the financial experience of Great Britain, France, Germany, and the United States during the first three years of the war. In the opening sentence Professor Laughlin observes: "Even though the immediate causes of the European War may have been dynastic ambition, exaggerated nationalism, and lust for power, the ultimate causes are undoubtedly to be found in economic conditions." Happily the succeeding pages, an excellent sketch of economic conditions and developments during the years preceding the conflict, do not compel the acceptance of this explanation. On the contrary, the rapid growth of German wealth and trade, the most striking feature of the chapter, forces the reader to accept rather the concluding sentence. "It is mere deception to speak as if Germany had been deprived of the chance for unlimited industrial and commercial growth in times of peace, and that she had to go to war for the right to legitimate economic development."

The financial experience of each of the countries considered is preceded by a serviceable account of monetary and banking arrangements and practice. The course of the crisis, which came with the outbreak of the war is then given detailed consideration. This is the most valuable portion of the volume. The financing of the war, and the monetary and credit changes which have marked its course are handled in more summary fashion, and the analysis is less satisfactory. Professor Laughlin is here too much concerned to find evidence for the validity of the principles of

credit which he has set forth in earlier publications. To the reviewer the inadequacy of the Laughlin theory of credit becomes strikingly evident in the light of experience during the war. The effective demand for goods, and consequently prices have risen portentously, because of an unprecedented expansion of credit. The initiating influence has been the resort to banks for more or less permanent accommodation in financing the war. Professor Laughlin does not admit this, even as a possibility, except under a régime of inconvertible paper money.

Those who do not accept Professor Laughlin's monetary views will find themselves disagreeing with him regarding many of his conclusions. A single instance will be sufficient to illustrate the matter. That German war finance has involved much inflation is evident to Professor Laughlin, because it has been largely in the form of paper money. He does not consider that there has been much inflation in Great Britain and in the United States where, owing to the general use of checks, it has been in the form of deposit credits. There may indeed have been more inflation in Germany than elsewhere, but that is a question which cannot be determined by the comparison of issues of paper money and the course of foreign exchange rates under the special restrictions on trade and gold movements, which were present during the war.

O. M. W. Sprague.

Harvard University.

Money. Its Connexion with Rising and Falling Prices. By Edwin Cannan. (London: P. S. King and Son. 1918. Pp. 66. 2s. 6d.)

This booklet presents in an interesting and popular form an explanation of the relation between money and prices. It was projected as a supplementary chapter to the author's *Wealth: a Brief Explanation of the Causes of Material Welfare* published in 1912 and was separately published because of the importance of the subject in the solution of the problems caused by the war.

The exposition begins with an explanation of the concepts, *the general level of prices* and *the value of the unit of account*, the former being declared to be merely an expression of the latter. The causes of changes in the general level of prices are then explained as the influences or circumstances which determine the demand and the supply of the unit of account, and these influences and circumstances are set forth in three sections, one treating the

general level of prices "where the unit of account is a fixed quantity of bullion uncoined or coined," the second where it is "a coin of which the issue is limited," and the third where it is "a bank note or a currency note."

The peculiarity of the author's treatment of each of these topics is the absence of any reference or appeal to the quantity theory of prices. His treatment of the demand and supply of the unit of account, as he calls it, in each of these cases is concrete and makes no use of such phrases and concepts as "the quantity of money in circulation," "rapidity of circulation," "quantity of commodities exchanged," etc.

In the first case "where the unit of account is a fixed quantity of bullion, uncoined or coined," he gives full recognition to those elements of demand which are outside of or independent of the currency, and in considering the currency demand he centers his discussion on the determination of the "magnitude of the average holding of coin" by individuals and institutions. The decisive factor in the case of individuals he finds in "the necessity or convenience of having means of payment at hand" (p. 12); and these have been so affected by "methods of setting one payment against another through banking and other agencies" that "the magnitude of the average holding of coin depends almost entirely on the magnitude of the smallest note which is allowed by law and is generally acceptable" (p. 14).

> How much coin will be held by the governments which issue paper currency and by banks, whether they issue bank notes or not, actually depends at present . . . on the decision arrived at by government and banking authorities, who often accept wholly erroneous theories, and who have to be guided to a large extent by the erroneous theories held by the public even when they do not accept them. So we find in different countries different amounts of coin held in reserve against liabilities which seem on the face of them very much the same, and very great changes in quite short periods (p. 15).

The second case considered, "where the unit of account is a coin of which the issue is limited," differs from the first in the fact that a charge is made for coinage, the effect of which is, according to the author's view, to limit the supply to such a degree as usually to raise the value of the unit above that of its metallic content by the amount of the charge. It will be somewhere between the value of its metallic content and that value *plus* the charge, if demand suddenly falls, but it can never fall below that

value on account of the ability of the holder to transform the coin into bullion by melting.

"Where the unit of account is a bank note or currency note" demand and supply still rule, but the value of the bullion or of the coin which constitutes the metallic unit and specified amounts of which the notes promise to pay, cannot be left out of account. The value of convertible notes cannot for any considerable length of time be above or below the value of the metallic unit, because an excess supply, which would tend to reduce their value below that point, would be at once taken from the market by conversion, and a deficient supply, which would tend to raise their value above that point, would be at once corrected by an increase of issues. The author thinks, however, that notwithstanding the fact that these notes circulate at par they tend to raise the level of prices by "displacing" coin, thus diminishing the demand for it. He thinks this tendency is to some extent counteracted by a "much larger quantity of currency (coin plus notes) being kept on men's persons than if there are no notes" (p. 46).

The case of inconvertible notes differs from that of convertible chiefly in the fact that an excess supply cannot be taken from the market by conversion and hence the value of such notes may and usually does sink below par. The author explains in an interesting way how such notes get into and are kept in circulation, but he almost entirely neglects and, in the judgment of the reviewer, underestimates the effect of purely subjective influences on their value. He seems to think that, when they once get into circulation, their value is very little influenced by anything except their demand and supply.

The author has written clearly and brought the subject within the easy comprehension of ordinary readers. He has undoubtedly rendered a service in helping to create correct public opinion on this important subject.

William A. Scott.

University of Wisconsin.

NEW BOOKS

Berges, M. and Besson, F. *Le problème monétaire et fiduciaire.* (Paris: Rivière. 1919. 5 fr.)

Blodgett, H. A. *The art of saving.* (St. Paul: Harvey Blodgett Co. 1918. Pp. 80.)

Cougnard, J. *La caisse d'épargne du canton de Genève, 1816-1916.* (Geneva: Albert Kündig. 1917. Pp. 189.)

DUCLOS, M. *La crise monétaire mondiale. Projet de solution par la création d'un billet de banque international.* (Paris: Impr. Chaix. 1918. Pp. 57.)

EBERSOLE, J. F. *Elementary banking.* (New York: Am. Inst. Banking. 1918. Pp. 288.)

EVANS, H. E. *Talks on banking to bank clerks.* (New York: Pitman. 1918. 2s. 6d.)

GARDNER, E. H. *New collection methods.* (New York: Ronald. 1918. Pp. xviii, 467. $4.)

A business man's book. It throws light on credit relationships between manufacturers, jobbers, and retail dealers. Chapter 26 treats of the trade acceptance.

GUGGENHEIM, W. *Our republic triumphant. A plea for sane banking and sound money. A plea for business operation. A plea for constitutional government.* (New York: Am. Defense Soc., 44 East 23d St. 1918. Pp. 70. 50c.)

KEMMERER, E. W. *The A B C of the federal reserve system.* (Princeton: Princeton Univ. Press. 1918. Pp. xiii, 182. $1.25.)

At first sight the book appears to be a considerably more elaborate treatise than the title would indicate, but a closer examination reveals the fact that but 90 pages, set in large type, are given to the discussion of the subject in hand. The rest of the volume is given over to four appendices containing, respectively, an annotated combined balance sheet of the twelve banks, the complete text of the Federal Reserve act and amendments, the parts of the text of the Farm Loan act affecting the federal reserve system and that part of the War Revenue act of April 24, 1917, which affects federal reserve banks. Two indexes follow, one of the act and its amendments and the other to the author's own text. The former is highly unsatisfactory since it refers only to sections, many of which cover a number of pages and subjects.

The purpose of the present work is, according to the author, "to set forth in non-technical language the chief reasons why the federal reserve system was called into being, the main feature of its organization and how it works." In his first four chapters, Professor Kemmerer has singled out for brief discussion, what he considers the four groups of chief defects of our old banking system, *viz.*, decentralization, inelasticity of credit, cumbersome exchange and transfer system, and defective organization as regards relationship with the federal treasury. The remaining four chapters point out the respective remedies which are provided by the federal reserve system. Not only are the legislative provisions of the system recorded in each case but the progress made to date in carrying them out is summarized as well. To boil down into a few brief paragraphs, free from technical language, the important features of so complicated and comprehensive a subject is by no means easy, but Professor Kemmerer has performed the task in admirable fash-

ion. Naturally, however, detailed explanation had to be sacrificed to brevity with the result that a reader without a fair knowledge of our financial mechanism and its method of operation may experience some difficulty in following some portions of the discussion.

George W. Dowrie.

Lehfeldt, R. A. *Gold prices and the Witwatersrand.* (London: King. 1918. 5s.)

Morgan, G. W. and Parker, A. J., Jr. *Banking law of New York, with supplement 1918, notes, annotations, references and amendments of 1918.* (New York: Banks Law Pub. Co. 1918. Pp. vi, 553.)

Pope, J. E. *The federal farm loan act.* (Washington: Bureau of Applied Economics, Department of Banking and Public Finance. 1917. Pp. 58.)

Rollins, M. *The banker at the boarding-house.* (Boston: Lothrop, Lee & Shepard Co. 1918. Pp. 411. $1.50.)

Sabin, C. H. *Banking evolution.* (New York: Guaranty Trust Co. 1918. Pp. 6.)

Shirras, G. F. *Memorandum of banking.* (Calcutta: Industrial Commission. 1918. Pp. 53.)

Stix, S. L. *Would the adoption of the trade acceptance be to your advantage? Address before convention of the National Coffee Roasters' Association, Cleveland, December, 1918.* (Philadelphia: George H. Paine. 1918. Pp. 16.)

Zaldari, P. *Trade acceptance discount tables.* (New York: Bankers Encyclopedia Co. 1918. Pp. 64.)

Acceptances. (New York: Guaranty Trust Co. 1918. Pp. 72.)

Bank amalgamations. Report of Treasury Committee. (London: King. 1918. 1s.)

Commercial banking practice under the federal reserve act. Revised edition. (New York: National Bank of Commerce. 1918. Pp. 127.)

Contains the law and regulations and informal rulings of the Federal Reserve Board, the opinions of counsel governing bank acceptances, rediscounts, advances and open market transactions of the federal reserve banks. A revision of the first edition, issued in July, 1917.

Loans and discounts. (Chicago: A. W. Shaw Co. 1918. Pp. xvi, 264.)

The one hundred years of the Salem savings bank. (Salem, Mass.: Salem Savings Bank. 1918. Pp. 44.)

Prices and cost of living. Reprinted from the *Monthly Labor Review,* Sept., 1918. (Washington: Bureau of Labor Statistics. 1918. Pp. 28.)

Proceedings of the tenth annual convention of the National Federation of Remedial Loan Associations. (Worcester, Mass.: Charles E. Burnham, 518 Slater Bldg. 1918. Pp. 38.)

Trust companies of the United States, 1918. (New York: Mortgage & Trust Co. 1918. Pp. lxv, 573.)

This useful annual contains statements of the condition of trust companies June 29, 1918, names of officers and directors, stock quotations, dividend rates, and the balance sheets of the trust companies of the country. More than one half of the total resources are represented by trust companies which have now joined the federal reserve system. Of the total resources of $9,381,000,000, $3,055,000,000 is accredited to New York and $1,256,000,000 to Pennsylvania. As usual, the volume contains digests of state regulations. One of the indexes lists these institutions by cities.

Public Finance, Taxation, and Tariff

A History of the Tariff Relations of the Australian Colonies. By CEPHAS DANIEL ALLIN. The University of Minnesota Studies in the Social Sciences, No. 7. (Minneapolis: Bulletin of the University of Minnesota. 1918. Pp. vi, 177. 75 cents.)

The appearance of this monograph is peculiarly timely in view of the war-induced prominence which of late has attended the question of imperial preference within the British Empire. This is so notwithstanding the sharp contrast between the world-wide scope of modern British imperial problems and the restricted range of conditions in the Australian colonies of 1860 which form the subject of Professor Allin's study. He makes it clear that all federal proposals among the struggling young colonies of that time "were looked upon with a certain amount of suspicion, as involving a possible limitation of local autonomy or a malevolent design against the welfare of the colony." The movement during the fifties and sixties for an assimilation of tariffs ended in an ignominious succession of petty squabbles. The colonies were too intent upon their own local and immediate ends to have concern for the larger aspects of intercolonial questions of interest to all. We may detect in the modern movement for imperial preference in the Empire a partial counterpart of this colonial sectionalism. Thus despite its liberalistic origin, for the purpose namely of saving the Empire from a gradual process of disintegration, the preference movement has at times been threatened by the growth within the Dominions of a spirit of protection. The parallel appears when we note the fact that the modern movement has been in danger of degenerating into a game of tariff manoeuvring, the

units in this instance being the Dominions rather than the separate colonies. The moral contained in Professor Allin's study is of singular significance therefore to students of the British imperial situation.

One is quite ready after reading this monograph to accept unreservedly the author's assertion that "the history of the tariff relations of the Australian colonies is a sorry record of intercolonial jealousy and strife." Although emancipated from the bondage of Downing Street by the Australian Colonies Government Act of 1850 little if any progress was made by the colonies during the two decades following toward the evolution of a national life or consciousness. "The scattered colonists, like the children of Israel, were doomed by a narrow provincialism to wander for forty years in the wilderness before they were ready to enter into their national heritage."

Although the tariff history of the Australian colonies during the period under review was little more than a succession, with perennial regularity, of tiresome negotiations and dismal failures, the reviewer ventures to withhold his complete acceptance of Professor Allin's assertion that "to the statesman or political scientist, the tariff history of this period is of small practical or scientific value." On the contrary, by very reason of its dismal hue the study of this period cannot but serve as an eloquent signpost of warning to future state builders. As such it deserves an honorable position beside the like story of fiscal failure which attended the progress of the United States during the critical years following 1783.

In the opinion of the reviewer a measure of ambiguity appears at times in the use of the term Colonial Secretary in the early part of the book. Thus on page 10 that term, used three times, applies to the Secretary for the Colonies in London, whereas on the following page its single appearance is for the purpose of designating the Colonial Secretary of New South Wales. Again on page 42 the reader for a moment is uncertain whether the term relates to the British or the colonial official.

This book which is at once both scholarly in method and interesting in style forms a valuable contribution to the literature in the double field of colonial government and colonial tariffs. It is to be hoped that Professor Allin will proceed with his expressed intention of incorporating in a future volume a study of the larger issues of colonial nationalism, imperial defence, and preferential

trade which have attended the maturer development of the Australian colonies.

THEODORE H. BOGGS.

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NEW BOOKS

ARMSDEN, J. *The financial crisis of August, 1914. Its nature, and how it was met.* (Chichester, Eng.: R. J. Acford. 1918. Pp. 18. 4d.)

CHASE, H. S. *Governmental sinking funds, serial bonds and depreciation reserves. Read at the annual meeting of the Dominion Association of Chartered Accountants at Montreal, Sept. 18-20, 1918.* (Boston: Harvey S. Chase, 84 State St. 1918. Pp. 18.)

COMBAT, F.-J. *Taxes et impôts nouveaux.* (Paris: Berger-Levrault. 1918.)

DECAMPS, J. *La guerre et les finances de la France.* (Paris: Tenin. 1918. 2.50 fr.)

FITZPATRICK, F. A. *Budget making in a democracy. A new view of the budget.* (New York: Macmillan. 1918. Pp. 319. $1.50.) To be reviewed.

GILBERT, A. B. *American cities. Their methods of business.* (New York: Macmillan. 1918. Pp. 240. $1.50.)

JÈZE, G. *Les finances de guerre de la France. La politique financière du gouvernement pendant les années 1915 et 1916.* (Paris: Giard & Briere. 1918. 7 fr.)

LAGAILLARDE, J. *Les nouvelles taxes sur les paiements et le nouveau droit proportionnel sur les effets de commerce.* (Toulouse: The author, 42 rue Bayard. 1918. Pp. 250.)

MESNIL-THORSET, A. S. *Le controle interallie de la dette allemande.* (Paris: Téqui. 1918. Pp. 15.)

PONTIFEX, B. *The Canadian income war tax act, 1917; with explanations by the minister of finance and instructions of finance department. Table of tax payable by individuals and companies fully indexed.* (Toronto: Finance Dept. 1918. Pp. 43.)

ROBERTSON, J. M. *The new tariffism.* (London: Allen & Unwin. 1918. Pp. 425. 2s. 6d.)

SMITH, H. H. *How to pay for the war, by developing the latent resources of the empire.* (London: Tropical Life, Pub. Dept. 1918. 5s.)

SNELLING, W. E. *Coal mines excess payments, guarantee payments and levies for closed mines.* (New York: Pitman. 1918. Pp. 176. $5.)

STILWELL, A. E. *The great plan.* (London: Hodder & Stoughton. 1918. 3s. 6d.)

Vallée, C. *Comment faire face aux budgets d'après-guerre?* (Paris: Rivière. 1918. 3 fr.)

Villard, H. G. and Willoughby, W. W. *The Canadian budgetary system.* (New York: Appleton. 1918. Pp. xii, 379. $2.50.)
To be reviewed.

Woodward, K. W. *Taxation of woodlots.* (Durham, N. H.: New Hampshire College Exten. Service. 1918. Pp. 19.)

City budget facts, 1918. An analysis of Toronto's budget for 1918. (Toronto: Bureau of Municipal Research, Traders Bank Bldg. 1918. Pp. 25.)

Constitutional conventions in Illinois. (Springfield, Ill.: Legislative Reference Bureau. 1918. Pp. 156.)
A discussion of taxation in Illinois, pages 86 to 96.

Corporate earnings and government revenues. Sen. Doc. no. 259, 65 Cong., 2 Sess. (Washington: Supt. Docs. 1918. Pp. 388.)

Excess condemnation. Why the city of Chicago should have the power, in making public improvements, to take property in excess of actual requirements. Lessons to be drawn from certain unfortunate aspects of the Twelfth Street and Michigan Avenue widening projects and the proposed Ogden Avenue Extension. (Chicago: Chicago Bureau of Efficiency, 315 Plymouth Court. 1918. Pp. 58.)

Financial statistics of cities having a population of over 30,000. (Washington: Bureau of the Census. 1918. Pp. 373.)

Fourth yearbook of the city managers association. (Auburn, Maine: Harrison G. Otis, Secretary. 1918. Pp. 128. 25c.)

The governor's budget in Maine, 1917. (New York: Bureau of Municipal Research. 1918. Pp. 105. 50c.)

Income tax, British, colonial, and foreign. (London: National Bank of South Africa. 1917. Pp. 60.)

Iowa law relating to collateral inheritance tax; a complete compilation of the Iowa statutes relating to collateral inheritance tax, with annotations from the courts of Iowa and New York; including excerpts from treaties now existing between the United States and foreign states. (Des Moines: State of Iowa. 1918. Pp. 170.)

National conference on war economy; a series of addresses and papers presented at the national conference on war economy held under the joint auspices of the Bureau of Municipal Research and the Academy of Political Science in the City of New York, July 5-6, 1918. (New York: Acad. Pol. Sci. 1918.)

Twenty-four billion. (New York: Bankers Trust Co. 1918. Pp. 31.)
Gives suggestions for the apportionment of the year's expenses among the 23,500,000 families in the United States.

Population and Migration

NEW BOOKS

CUMMINGS, J. *Negro population, 1790-1915.* (Washington: Bureau of the Census. 1918. Pp. 844.)

This volume recently issued by the Bureau of the Census contains the most complete statistical presentation of material bearing on the Negroes ever published. After the completion of the data in the twelfth census the well known Bulletin 8 was prepared by Professor Willcox and Dr. DuBois. This bulletin has been up to date the greatest standby of all students of the Negro problem. When the statistics of the thirteenth census became available a brief bulletin on the Negro population of the United States, 1910, was issued which consisted largely of a collection of all the data relating to Negroes scattered throughout the volumes of the thirteenth census reports. The present publication not only brings together all the statistics on the Negroes that have ever been published by the census but adds to them a very large amount of data, by counties, that have never been available before, as well as interpretive text which is a model of thoroughness and lucidity.

The report consists of seven parts as follows: (1) Growth and geographic distribution, 1790-1910; (2) Migratory displacement and segregation; (3) Physical characteristics; (4) Vital statistics; (5) Educational and social statistics; (6) Economic statistics; (7) General tables. The mere enumeration of these parts shows that the subject has been treated from a number of different points of view and also that the material is arranged with a view to a logical presentation of facts rather than in a manner, not unusual to census publications, of following the order of the questions in the schedules rather than attempting logical arrangement. There is a chapter in the second part on Urbanization which is highly significant; in part 4 there is a chapter on Fertility based on the proportion of children to women of child-bearing age; and part 5 contains a chapter on the delinquent, defective, and dependent classes.

The report is a vast storehouse of information prepared with great care and the ripe scholarship characteristic of the author. It is illustrated by a number of maps and diagrams which in themselves present an interesting feature, for they are a distinct departure from the traditional methods of graphic presentation and are as effective as they are original. An interesting feature of the report is that the tabulations were prepared by a corps of Negro clerks working under the direction of three members of their own race, Robert A. Pelham, Charles E. Hall, and William Jennifer.

E. A. GOLDENWEISER.

DUBLIN, L. I. *Mortality among women from causes incidental to child-bearing.* Reprinted from the *American Journal of Obstetrics and Diseases of Women and Children,* vol. LXXVIII, no. 1. (New York: William Wood & Co. 1918. Pp. 18.)

HOFFMAN, F. L. *The mortality from degenerative diseases.* (Newark, N. J.: Prudential Ins. Co. 1918. Pp. 12.)

HUNTER, F. B. *Infant mortality. Result of a field study in Waterbury, Connecticut, based on births in one year.* Infant mortality series, no. 7. Bureau publication no. 29. (Washington: Children's Bureau. 1918. Pp. 157.)

JENNINGS, H. J. *The coming economic crisis.* (London: Hutchinson & Co. 1918. Pp. 136. 3s. 6d.)

LEDBETTER, E. E. *The Slovaks of Cleveland, with some general information on the race.* (Cleveland: Americanization Committee. 1918. Pp. 32. 25c.)

MILLARD, C. K. *Population and birth control.* (Leicester, Eng.: W. Thornley & Son. 1917. Pp. 48. 1s.)

POPENOE, P. and JOHNSON, R. H. *Applied eugenics.* (New York: Macmillan. 1918. Pp. 459. $2.10.)

REUTER, E. B. *The mulatto in the United States; including a study of the role of mixed-blood races throughout the world.* (Boston: Badger. 1918. Pp. 417. $2.50.)

DE ROUX, LE MARQUIS. *L'état et la natalité.* (Paris: Nouvelle Librairie Nationale. 1918.)

SAVORGNAN, F. *Le problème de la population après la guerre.* (Bologna: N. Zanichelli. 1918. Pp. 11.)

SCHROEDER, T. *List of references on birth control.* (New York: H. W. Wilson Co. 1918. Pp. 52.)

WOODSON, C. G. *A century of negro migration.* (Washington: Assoc. for Study of Negro Life and Hist. 1918. Pp. 221. $1.)

Annual report for 1916 of the registrar-general of births, marriages, and deaths. Cd. 8869. (London: Wyman. 1918. 5s.)

Birth statistics for the registration area of the United States, 1916. (Washington: Bureau of the Census. 1918. Pp. 96. 20c.)

Social Problems and Reforms

NEW BOOKS

BARNES, H. E. *A history of the penal, reformatory and correctional institutions of the state of New Jersey: analytical and documentary.* (Trenton, N. J.: MacCrellish and Quigley Co. 1918. Pp. 654.)

This thorough analysis of the penal system of New Jersey is of more than local interest. "The fact that New Jersey experimented with practically all the chief types of penal institutions which have been tried in this country" makes an account of their development of general value. The book is, moreover, a scientific study made in the light of modern political and social science. It constitutes volume II of the New Jersey Prison Inquiry Commission report of 1917.

About half the volume is devoted to historical analysis, which is subdivided topically and by institutions. While the account is somewhat detailed in parts, excellent summaries are provided. The book is indexed and contains a bibliographical note on sources for New Jersey material. Frequent references in footnotes support important statements in the text. The documents of the second half of the book are accompanied by notes by the author calling attention to their significance.

While Dr. Barnes naturally leaves the matter of formal recommendations to the commission, his study is a forcible argument for the further application of the principles of scientific criminology to the penal system. With crime prevention and criminal reformation as the goals the individualization of the treatment of offenders is the guiding principle of his critical analysis.

Few criminologists would quarrel with the program of penal reform implied in Dr. Barnes's book. Some would perhaps qualify their faith in the Binet-Simon tests and the Freudian analyses. Others might stress more prominently the blighting effect of wretched county penal institutions and methods upon even the most ideal state system. But such criticisms would be merely matters of emphasis. Dr. Barnes's penology is fundamentally sound. His study is a real contribution to penal reform.

The reviewer believes, however, that the author's greatest service through this study is in the field of practical politics. He points out how legislatures are prone to make patchwork alterations when fundamental changes alone will suffice; or how they reluctantly make appropriations for cell-blocks which are potentially overcrowded before they are completed. He tells of the preservation in a penal code of 1898 of "the ancient statute which dates back as far as the Pauline Epistles and the Theodosian Code of 438, prescribing punishment for 'false prophets'." Everywhere he shows how efficient administration has been made impossible by the constant use of the appointing power to pay political debts. But these evils, he concludes, are but symptoms of the fundamental difficulty which "in the past has been that society has not understood the nature of the causation of crime." Because of this lack of understanding society has permitted partisan control of the penal system. Partisan control has meant inefficient when not corrupt administration. And finally inefficiency has prevented the application of scientific penological principles. The fundamental problem then is educational.

In the reviewer's judgment Dr. Barnes has served not only the state of New Jersey, but all who are interested in penal and political reform.

Donald R. Taft.
Ohio State University.

Beck, J. M. *The reckoning. A discussion of the moral aspects of the peace problem, and of retributive justice as an indispensable element.* (New York: Putnams. 1918. Pp. xxx, 225. $1.50.)

BEST, H. *The blind, their condition and the work being done for them in the United States.* (New York: Macmillan. 1918. $3.)

BREMNER, R. L. *The housing problem in Glasgow.* (Glasgow: Scottish Council for Women's Trades. 1918. Pp. 28. 6d.)

CLAGHORN, K. H. *Juvenile delinquency in rural New York.* Dependent, defective, and delinquent classes series, no. 4. Bureau publication no. 32. (Washington: Children's Bureau. 1918. Pp. 199.)

COMMONS, J. R. *Industrial education and dependency.* Revised edition. (Madison: Univ. Wis. 1918. Pp. 20. 10c.)

COOKE, M. L. *Our cities awake. Notes on municipal activities and administration.* (Garden City, N. Y.: Doubleday, Page & Co. 1918. Pp. xxi, 351. $2.50.)

EARP, E. L. *The rural church serving the community.* (New York: Abingdon Press. 1918. Pp. 144.)

FAAST, B. F. *Rural planning and colonization.* (New York: National Real Estate Journal. 1918. Pp. 14.)

GALPIN, C. J. *Rural life.* (New York: Century. 1918. $2.50.)

GEBHART, J. C. *Housing standards in Brooklyn.* (Brooklyn, N. Y.: Tenement House Committee of the Brooklyn Bureau of Charities. 1918. Pp. 60.)

An intensive statistical study summarizing data relating to more than 3,000 apartments in regard to sanitary conveniences, water supply, bathrooms, overcrowding, lodgers, types of houses, prevalence of tuberculosis, rents, and nationalities of tenants.

GRANT, P. S. *Fair play for the workers. Some sides of their maladjustment and the causes.* (New York: Moffat, Yard. 1918. Pp. xii, 368. $1.60.)

The author, keenly alive to the significance of different phases of social discontent and maladjustment, presents chapters on: The worker's lost status and his unrest; The working-man and patriotism; The Americanizing of the immigrant worker; Administration of the law and the worker; Physical betterment, the function of the state; Unjust laws and how to remedy them; Are rich Americans aiding Americanization? The waste of ignorance and competition; The economic influence of religion; Labor organization and its influence on our problems. He sharply arraigns current indifference and supports his indictment by abundant quotations from contemporary reformers.

HARRISON, S. M. *Social case workers and better industrial conditions.* (New York: Charity Organization Department of the Russell Sage Foundation. 1918. Pp. 23. 10c.)

HART, J. K. *Democracy in education; a social interpretation of the history of education.* (New York: Century. 1918. Pp. 418.)

HART, H. H. *The war program of the state of South Carolina.* (New York: Russell Sage Foundation. 1918. Pp. 61.)

HUSSLEIN, J. C. *The world problem; capital, labor, and the church.* (New York: Kenedy. 1918. Pp. 296. $1.25.)

The author is lecturer in the Fordham University School of Sociology.

JOHNSON, F. E. *A bibliography of social service.* (New York: Federal Council of the Churches of Christ in America, 105 East 22d St. 1918.)

KNIGHT, A. S. and DUBLIN, L. I. *The relation of cancer to economic condition.* (New York: Metropolitan Life Ins. Co. 1917. Pp. 10.)

KOREN, J. *Summaries of state laws relating to the insane.* Revised by S. W. HAMILTON and R. HABER. (New York: National Committee for Mental Hygiene. 1918. Pp. 272.)

MANN, C. R. *A study of engineering education.* (New York: Carnegie Foundation for the Advancement of Teaching, 576 Fifth Ave. 1918. Pp. 139.)

MARBURG, T. *League of nations. Its principles examined.* Vol. II. (New York: Macmillan. 1918. Pp. 137. 60c.)

MORGAN, E. L. *Mobilizing the rural community.* Extension bull. no. 23. (Amherst, Mass.: Mass. Agricultural College. 1918. Pp. 54.)

RICHMOND, M. E. *War and family solidarity.* (New York: Russell Sage Foundation. 1918. Pp. 14.)

ROUTZAHN, E. G. and M. S. *The A B C of exhibit planning.* (New York: Russell Sage Foundation. 1918. Pp. 234. $1.50.)

SIMPSON, J. Y. *Some notes on the state sale, monopoly and subsequent prohibition of vodka in Russia.* (London: King. 1918. 1s. 6d.)

SMITH, E. J. *Race regeneration.* (London: King. 1918. Pp. 223. $2.25.)

STEVENS, E. F. *The American hospital of the twentieth century; a treatise on the development of medical institutions, both in Europe and in America, since the beginning of the present century.* (New York: Architectural Record Pub. 1918. Pp. 274. $5.)

TABER, C. W. *The business of the household.* (Philadelphia: Lippincott. 1918.

TEAD, O. *The people's part in peace. An inquiry into the basis for a sound internationalism.* (New York: Holt. 1918. Pp. 156. $1.10.)

WRIGHT, L. and HAMBURGER, A. M. *Education and occupations of cripples, juvenile and adult; a survey of all the cripples of Cleveland, Ohio, in 1916, under the auspices of the Welfare Federation of Cleveland.* (New York: Red Cross Institute for Crippled and Disabled Men. 1918. Pp. 227.)

Housing in England and Wales. Reconstruction problems, 2. (London: Ministry of Reconstruction. 1918. Pp. 24.)

Medical examination campaigns. No. II. Framingham monograph no. 4. (Framingham, Mass.; Community Health Station. Nov., 1918. Pp. 48. 5c.)

New towns after the war. An argument for garden cities. (London: Dent. 1918. Pp. 84. 1s.)

Aims of reconstruction. Reconstruction problems, 1. (London: Ministry of Reconstruction. 1918. 2d.)

Reconstruction after the war. Journal of the National Institute of Social Sciences, vol. IV. (Boston: Boston Bk. Co. Apr., 1918. Pp. 242.)

Includes brief papers on: Financial reconstruction after the war, by George E. Roberts; Labor laws in the crucible, by John B. Andrews; Problems of immigration and the foreign born after the war by Henry Pratt Fairchild; and The free traders of America, by George Haven Putnam.

Sanitation of rural workmen's areas. Public health report for September 6, 1918. (Washington: U. S. Public Health Service. 1918.)

Among the topics discussed are the collection of garbage and excreta, water supply, draining, and types of housing for industrial villages.

Standard catalog, sociology section; one thousand titles of the most representative and useful books on social, economic and educational questions. (New York: H. W. Wilson Co. 1918. Pp. 99. $1.)

Insurance and Pensions

Workmen's Compensation and Insurance. By Durand Halsey Van Doren. (New York: Printed for the Department of Political Science of Williams College by Moffat, Yard and Company. 1918. Pp. x, 332. $2.00.)

This new sketch of workmen's compensation was prepared in successful competition for the David A. Wells prize, which is offered annually to Williams College men within one year before graduation or three years after. It gives the legal and historical basis of compensation, summarizes American legislation, presents systematically the author's ideas as to a model statute, traces at length the experience of New Jersey, states the attitude of American labor, describes the federal soldiers' and sailors' insurance act of 1917, and concludes with a short chronological bibliography.

As the fruit of a narrowly limited competition among young writers, the book has merit, in fact, high merit. It shows a great deal of painstaking study. In narrowly literal and statistical ways it is remarkably accurate. Its author has a good general appre-

ciation of his subject; and it is well written. Through it any reader can come to a fairly clear understanding of workmen's compensation.

Yet closely limited prize competitions are not likely to produce masterpieces. And one must doubt the wisdom of putting such a work as the present before a general public which already had two excellent little manuals of substantially similar scope, Blanchard's *Liability and Compensation Insurance* and Rhodes' *Workmen's Compensation*. For, although Mr. Van Doren's volume makes a much more imposing appearance, with thick paper, broad margins, large type, heavy leading, and gilt top, there is in it less matter, at least less relevant matter than in either of the two other manuals with which naturally it will be compared. Indeed, were eliminations made of some duplications and a few discussions which, if not exactly extraneous, could well be spared from so brief a work, the strictly relevant matter might be found not much more than half that in either of the two other books.

The present work also lacks something in the way of symmetry or proportion, as well as in logical arrangement and development. Why a full chapter, and a very fragmentary one, on the attitude of labor and not a word as to the attitude of employers? Why much the longest chapter of all on the trite topic of New Jersey's shortcomings? Why include a full account of the soldiers' and sailors' insurance act, its family allotments and its life insurance as well as its compensation features? At least, why all of these while essential matters of compensation proper are clipped at a hundred points?

It would be ungracious to cumulate adverse criticisms. They would be of a character now easily to be anticipated. Perhaps the author's self-imposed brevity may explain the greater number of his failings, as in defining workmen's compensation by reference only to the employee's legal rights (p. 3) and in stating the employer's common law obligations to make his employment safe (pp. 8-9). But mere lack of space cannot account for the very imperfect statement of reasons for the common American denial of compensation to domestic and farm workers (pp. 185-6) and to those affected by industrial diseases (pp. 191-2). It is a trivial error to credit New Jersey with the earliest of the permanent American compensation laws (p. 178): it is more serious error to take the first Kentucky statute (p. 69) and the present federal one (p. 107) as providing compulsory compensation.

Only from imperfect knowledge could a writer tracing the all too slow advance toward adequate medical care for injured employees (p. 119) fail to mention Connecticut, the first of three states to provide unlimited care. Organized labor has been much less favorable to compensation than Mr. Van Doren supposes (ch. VII), since no longer ago than 1909 Mr. Gompers himself declared his preference for an improved liability law. Nor is it fair to say that private insurance carriers are "discredited as a force for reducing accidents" (p. 172).

While the English style, on the whole, is superior to that with which American economists often afflict their readers, there are a few glaring lapses, as at the bottom of page 17 and in the reference to "fore-thoughted ideas" (p. 282). It is something worse than bad English to name a writer (p. 243) and then charge him with "a temporary hiatus of common sense." And, perhaps, it would be better not to accuse American legislators of "craven fear" and "disgraceful subterfuges" (p. 298).

Two conspicuous errors may be charged to the printer or the proof-reader. "Not *less* than five years after" (p. 291) should be "Not *later* than five years after." "Uniform *accuracy*" (p. 297) should be "uniform *adequacy*."

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NEW BOOKS

Dominge, C. C. and Lincoln, W. O. *Fire insurance inspection and underwriting; an encyclopedic handbook.* (New York: Spectator Co. 1919. Pp. 511. $5.)

Fitch, J. A. *For value received. A discussion of industrial pensions.* (New York: Survey Associates. 1918. 5c.)

Flitcraft, A. J. *Life insurance manual; application agreements and complete policy forms of seventy-one life insurance companies.* Thirty-first annual edition. (Oak Park, Ill.: A. J. Flitcraft. 1918. Pp. 1318.)

Forbes-Lindsay, C. H. A. *Business insurance, a concise description of the adaptation of life insurance to corporations, business firms, and individuals.* (New York: Spectator Co. 1918. Pp. ix, 114.)

Frankel, L. K. and Dublin, L. I. *Visiting nurse and life insurance. A statistical summary of results of eight years.* Reprinted from *American Statistical Association Quarterly Publications,* June, 1918. (New York: Metropolitan Life Ins. Co. 1918. Pp. 55.)

Furst, C. and Kandel, I. L. *Pensions for public school teachers.*

Bulletin no. 12. (New York: Carnegie Foundation for the Advancement of Teaching. 1918. Pp. xi, 85.)

There are sixty-seven teachers' pension funds in the United States, only a few of them solvent and most of them certain to bring some sort of disappointment to the men and women who have paid their scanty savings into them. In the hope of aiding the readjustment of the faulty funds and of preventing the repetition of the mistakes of the past, the Carnegie Foundation has published this compendium of information on the subject.

The introduction to the study consists of a brief report of the committee on salaries, pensions, and tenure of the National Education Association, giving a general statement of the problem. The first part of the volume is entitled The Social Philosophy of Pensions and in spite of its title is a readable, sane presentation of the essential points to be considered in establishing a pension system. The non-contributory plan is condemned as heartily as the contributory plan is approved, while compulsory membership is pointed out as desirable and necessary. The existing superannuation, the writers claim, is a burden to be assumed by the employer whenever a new system is inaugurated, though the possibility of making membership for the older employees optional is suggested as an alternative. An interesting feature of the volume is the positive stand taken by the writers on the matter of age of retirement; length of service alone usually means retirement at an early age, as at fifty or even forty-five, and such retirement "is economically and socially unjustifiable." Even sixty is a generous age for voluntary retirement and at a later point, sixty to sixty-five is mentioned as appropriate, with seventy as the compulsory age. The benefits of a pension system should include a pension on retirement, provision in case of disability and arrangement for return of contributions in case of separation from the service or death. Throughout the whole chapter, special emphasis is placed on the absolute necessity of accumulating in advance the capital fund necessary to provide the benefits by current contributions from both the teacher and the employer. All systems should be subjected to periodical actuarial investigations.

This section of the book is followed by an extensive review of the more important systems now in operation, with a tabular statement of their provisions. One valuable feature is the outline of a system prepared for the puplic schools of Vermont, giving the statistical and actuarial tables used in drafting the plan.

The value of the book is its clear statement of the essential points involved in the problem and its emphasis on the fact that pensions cost money which can only be secured by long periods of payment.

Henry J. Harris.

Hayden, H. R. *Annual cyclopedia of insurance in the United States, 1918.* (Hartford, Conn.: C. B. Caverly. 1918. Pp. 601.)

Hersey, H. *Helpful hints on war risk insurance, compensation, al-*

lotments and allowances. (Fort Hancock, N. J.: Post Exchange. 1918.)

Hogge, J. M. and Garside, T. H. *War pensions and allowances.* (London: Hodder & Stoughton. 1918. Pp. 463.)

Jones, F. R. *Enactments of 1918, affecting the Massachusetts workmen's compensation law, August, 1918.* (New York: Workmen's Compensation Publicity Bureau, 80 Maiden Lane. 1918. Pp. 7.)

Jones, F. R. *Workmen's compensation law of Porto Rico, effective July 1, 1918.* (New York: Workmen's Compensation Publicity Bureau. 1918. Pp. 22.)

Larter, A. E. and Lemmon, W. S. *The L. & L. rating system, designed to effect standardization of fire insurance rating based upon an analysis of conditions contributing to the fire loss.* Revised May, 1918. (New York: The author. 1918.)

Nichols, W. J. *The co-insurance clause. An address delivered before the one hundred and twenty-ninth meeting of the Insurance Society of New York on March 7, 1916.* (New York: Ins. Soc. of N. Y. 1918. Pp. 26.)

Richards, B. *The cotton bale as a source of loss by fire.* (New York: Am. Exchange Nat. Bank. 1918. Pp. 11.)

Enactments of 1918, affecting the Massachusetts workmen's compensation law, August, 1918. (New York: Workmen's Compensation Publicity Bureau. 1918. Pp. 7.)

Fire insurance in New England for ten years, December 31, 1908-December 31, 1917, inclusive. Nineteenth edition. (Boston: The Company, 141 Milk St. Pp. 241. $7.50.)

New York state workmen's compensation law. With amendments, additions and annotations to July 1, 1918. (Albany, N. Y.: Statistics and Information. 1918.)

Present issues before the contributors to the Philadelphia teachers' retirement fund. (Philadelphia: Teachers' Retirement Fund. 1918. Pp. 28.)

An explanation of the alternatives before the teachers if they decide to remedy the situation before it becomes worse. Apparently the safest course to adopt is to amalgamate with the state fund, which would then assume part of the accrued liabilities. H. J. H.

A report on the condition of the teachers' retirement fund, including service and mortality tables based on the actual experience of teachers in Philadelphia. (Philadelphia: Teachers' Retirement Fund. 1918. Pp. 51.)

An actuarial valuation of the fund by Mr. George B. Buck, who finds a deficit of about nine million dollars and analyzes the causes of the threatened bankruptcy. A series of tables which present the actual experience of the fund as regards death, withdrawal, etc., is an important contribution to our stock of information on the subject.

H. J. H.

Soldiers pensions regulations. Proceedings of the special committee, etc., comprising the evidence taken and papers submitted and received April 10 to May 20, 1918. (Ottawa: Printed by order of Parliament. 1918. Pp. xv, 349.)

Vest pocket life agents brief. Tenth edition. (Chicago: Spectator Co. 1918. Pp. 364. $1.)

Pauperism, Charities, and Relief Measures

NEW BOOKS

Felt, D. E. *Organized charities and social welfare work. From the viewpoint of an employer.* (Chicago: Felt & Tarrant Mfg. Co. 1918.)

Slingerland, W. H. *Child welfare work in Oregon.* (Eugene: Univ. of Oregon. 1918. Pp. 131.)

Warner, A. C. *American charities.* Revised by M. R. Coolidge. (New York: Crowell. 1919. Pp. xix, 490. $2.50.)

Annual report of the Charity Commission for England and Wales for 1917. Cd. 9008. (London: Wyman. 1918. 2d.)

Socialism and Co-operative Enterprises

NEW BOOKS

Beckitt, M. B. and Bechhofer, C. E. *The meaning of national guilds.* (London: Palmer & Hayward. 1918. Pp. 468. 7s. 6d.) To be reviewed.

Bevan, E. *German social democracy during the war.* (London: Allen & Unwin. 1918. 5s.)

Bubnov, J. V. *The coöperative movement in Russia: its history, significance, and character.* (Manchester, Eng.: Coöperative Prtg. Soc. 1918.)

Claessens, A. and Feigenbaum, W. M. *The socialists in the New York assembly.* (New York: Rand School of Social Science. 1918.)

Gebhard, H. *Coöperation in Finland.* (London: Williams & Norgate. 1918. 5s.)

Hughes, T. I. *State socialism after the war.* (New York: Brentano. 1918. $1.50.)

Latorre, G. *Le socialisme en Espagne depuis 1886.* (Madrid: Imp. de los Sucesores de Hermando. 1918.)

Laidler, H. W. *Public ownership throughout the world. A survey of the extent of government control and operation.* (New York: Rand School of Social Science. 1918. Pp. 48.)

Liebknecht, K. *The future belongs to the people.* Edited and translated by S. Zimand, with an introduction by Walter Weyl. (New York: Macmillan. 1918. Pp. 144. $1.25.)

Verbatim report of speeches and messages of Liebknecht during the war, including the May Day speech of 1916 which caused his imprisonment. The Reichstag transcript shows the passage which called forth the approval of social democrats and the cautions given by the presiding officer. The addresses deal rather with the conduct of the war than with economic questions.

MacKaye, J. *Americanized socialism.* (New York: Boni & Liveright. 1918. Pp. x, 191. $1.25.)

This book presents a variety of socialism so mild and sugar-coated that even the most conservative could read it without undue alarm. It is socialism without Marx. The reader is not mystified with surplus value, is not distressed with the class struggle, and is not terrified by the social revolution. Socialism is defined in the words of Hillquit, as the "public or collective ownership and operation of the principal instruments and agencies for the production and distribution of wealth." The author describes the chaotic condition of capitalistic industry and the perversion of private property into a means of exploitation. The socialization of industry is conceived as the application of the principles of efficiency engineering to the social problem. The transition to socialism will come gradually and with due regard for established property rights.

The development of the argument is logical although the presentation is not particularly forceful. The chief criticism to be offered is that fundamental social changes such as these do not usually take place in an orderly and peaceful manner. In the light of history and especially in view of present-day events one can hardly expect a transition to socialism without violent revolution and the bitter struggle of classes. G. L. Arner.

Maru, I. *Catolicismo social y socialismo al desnudo, o los problemas de carne y hueso.* (Tafalla: Imp. y. Lib. de Valero Albéniz. 1918.)

Sanders, W. S. *Pan-German socialism (neo-Marxism).* Reprinted from The New Age. (London: W. Smith & Son. 1918. Pp. 24.)

Smith, L. S. *Coöperation for farmers.* (London: Williams & Norgate. 1918.)

Todd, A. M. *Municipal ownership, with a special survey of municipal gas plants in America and Europe.* (Chicago: Public Ownership League of America. 1918.)

Tufts, J. H. *The ethics of coöperation.* (Boston: Houghton Mifflin. 1918. Pp. 73. $1.)

Walsh, C. M. *Socialism and feminism, with an introduction on the climax of civilization.* Three volumes. (New York: Sturgis & Walton. 1917. Pp. x, 150; viii, 518; vi, 393.)

Inter-allied labour and socialist conference. (London: Labour Party, 33 Eccleston Sq. 1918. 6d.)

A program of social reconstruction after the war. (New York: Social Democratic League of America, 277 Broadway. 1918. Pp. 18.)

Statistics and Its Methods

The History of Statistics. Their Development and Progress in Many Countries. In Memoirs to Commemorate the Seventy-Fifth Anniversary of the American Statistical Association. Collected and edited by JOHN KOREN. (New York: The Macmillan Company. 1918. Pp. xii, 773. $7.50.)

This is, I believe, the only book in English, certainly the only important one, on the history of statistics, a remarkable fact when we remember that statistics as ordinarily conceived originated in London and that the oldest societies devoted to the subject are in England and the United States. A comparison between the present work and books or articles in other languages carrying the same or a similar title shows how differently the subject is conceived. Writings in French, Italian, or German on the history of statistics describe the development of statistics under the hands of private authors or university teachers; this book describes its development by legislators and administrators. The difference is suggested in the "their" of the title, for statistics as a collection of facts expressed in numerical form is a plural noun, but statistics as a method or a science, like mathematics, is a singular noun. The same difference is suggested by the introduction and by the title of the second and main division of the work, History and Development of Official Statistics in Many Countries. But its clearest statement is at the beginning of Professor Faure's memoir on the development of statistics in France. He says: "In the domain of history it has long been the habit . . . to confuse the practice of statistics with the theory of statistics. . . . It is necessary to study them separately . . . just as it is important to study separately the history of economic fact and the history of economic theory" (p. 217).

The present work, then, is mainly a history of the practice of statistics or of the efforts made by the various countries to gather and present information in numerical form about their own life and activities. Nearly one third of the space is devoted to the United States, with one address by the editor on the History of the Association, another by Dr. North on Seventy-five Years of Progress in American Statistics, and two memoirs, one on Federal Statistics, by Dr. John Cummings, the other on State Statistics, by Director Charles Gettemy.

In writing the history of statistical practice it is evidently hard to find and keep the thread of connection. The writers of these

memoirs do not fully agree among themselves as to what that thread is. Some evidently take the acts of the legislative and administrative agencies as their subject-matter; others regard the practice of statistics and its development as largely a product of individuals and give generous space for describing their work. Apparently the American writers center their attention on federal and state statutes, the European writers give more space to the persons involved. Perhaps the most significant contribution on American statistics is that of Dr. Cummings on Federal Statistics, which fills more than one seventh of the volume and more space than the three articles on other divisions of American statistics. In this valuable monograph the administrative statistical agency, like the Bureau of Education, is the unit for study. I doubt that this is better, though it certainly is easier, than to center attention on the kinds of statistical information obtained. Surely it would be more helpful to inform the inquirer that he could get some kinds of educational statistics from the annual reports of the Bureau of Education, illiteracy statistics from the federal censuses and those of certain states, etc., and to trace how these returns grew up and how the agencies gathering them have changed and developed. Perhaps it would have been still better to trace also the part that notable men have played in the history of American statistics, showing, for example, the influence of men like Shattuck, Walker, and Billings on our census development, Wright on the development of labor statistics, etc. A history of legislative and administrative changes tends to become mechanical; it is the persons behind these changes who vitalize the story.

In this respect the writers on foreign statistics seem as a rule to have interpreted their themes in a more significant way. Sir Athelstane Baines rightly puts John Graunt (not Grant) at the head of his tale of the growth of British statistics and finds fitting places for Halley and Sinclair, Rickman and Porter; Dr. Julin makes very clear the seminal influence of Quetelet in Belgium; Professor Faure in what seems to me the most valuable, as with the exception of that of Dr. Cummings it is the longest, paper in the volume shows how in their several fields Bodin and Sully and Colbert and Deparcieux and Necker and others contributed to build up the present system of French statistics.

But in pointing out this superiority of the best foreign work in the volume to that of our American scholars it would be unjust to

leave the impression that the latter are seriously at fault. Rather is it true that they have had to do pioneer work blazing trails or breaking ground while their European colleagues have had the work of many predecessors to build upon. Let me close by expressing my gratitude to the editor, his collaborators and the Association itself for this dignified and worthy memorial volume, and my belief that further monographic studies in this field are needed, some of which might profitably take as themes the statistical work and contributions of our best American statists.

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Statistical Methods Applied to Education. By HAROLD O. RUGG. (Boston: Houghton Mifflin Company. 1917. Pp. xvii, 410. $2.)

Another textbook in statistics has been added by Professor Rugg to our scant but growing list. In addition to chapters on the use, collection, tabulation, classification, and graphic presentation of educational data, there is one chapter on averages, one on variability, two on frequency curves, and one on correlation. The scope of the book, therefore, includes the practical phases of educational statistics and the simpler portions of statistical theory; and the treatment makes it an elementary text.

The material of the book is from the field of education. And the fact that the author is a professor of education raises the expectation of a superior teachable presentation of the subject. I think this natural expectation is fully met. My students who have used it as reference all testify that the presentation makes the methods easy to understand. The first chapter presents several most interesting results and uses of statistics without explaining the method or technique. This device greatly stimulates the interest of the student. The chapter on correlation is excellent from the pedagogical point of view. In this chapter the regression equations are discussed at length before the coefficient of correlation is introduced, which is, I think, the most teachable method. Many textbooks in mathematics and statistics are difficult for non-mathematical beginners because the explanations are greatly condensed. Professor Rugg's book, on the other hand, impresses one as sparing no words to explain.

The most noticeable defect is the treatment of the theory of

sampling. Sampling is discussed very scantily as a subdivision of the chapter on the normal frequency curve. Perhaps the author would reply that sampling is advanced statistical theory. Nevertheless, it is most important even for the beginner. Also the discussion of sampling not only seems inadequate but seems here and there to give the wrong impression. For instance, in discussing (p. 380) the fitting of the theoretical curve to the actual curve he suggests testing the frequency of the ordinates by subtracting or adding 3 $\sqrt{npq}$, saying nothing about the fact that although all ordinates may fall within these limits yet the actual curve will diverge from the normal curve beyond the limits of probability, because of the fact that it may be very improbable that two or more probable events will occur at the same time.

Furthermore, the author leaves the reader with the idea that the true arithmetic mean as contrasted with the sample arithmetic mean is based on all the cases that exist rather than on a theoretically infinite number of cases. "The *true* average spelling ability in the sixth grade of a large city system could be found by testing *all* of the 20,000 children, say, in all of the sixth grades in the system" (p. 224). If there were only five, say, Sanskrit scholars in the world, five would still be only a very small sample of a theoretically large number.

In discussing (p. 225) the distribution of averages of samples of 200 cases, he says "the best assumption" we can make is that they accord with the probability curve. This is a very important point in the theory of sampling. "The best assumption" could be considerably strengthened by reference to the extensive mathematics to prove that these averages follow the normal probability curve.

Also the designation of $\sqrt{npq}$ as "the standard error of sampling" (p. 380 and p. 213) although commonly done, seems to be rather misleading description, as there are, of course, many other standard errors of samples.

The pitfalls of deceptive and spurious correlation are many. Professor Rugg warns of these, though sometimes vaguely (p. 254). ". . . such devices do not supply proofs of existing relationships . . . . they are valuable in so far as they agree with sound logical analysis." The author also warns against the use of the correlation coefficient where the numbers are small, and has some very excellent discussion of this point. This is very important and timely, as a good many psychologists and education-

alists are using the coefficient of correlation when the number of cases are very few, sometimes as few as 10 or 12.

One might also quarrel with the author on his notation. Nearly every writer has some special notation peculiarly his own; that is to say, the formulas and constants in our text books have quite a variety of letters to represent each. Pedagogically, it would be better to approach still greater unity. The author uses in his chapter on variability the letter d to denote the variable differences between the arithmetic mean or the arbitrary origin of a variable and any number in the variable; while in the chapter on correlation the identical same difference is designated by x and x' (and y and y'). Σ which usually means "the sum of" is used in another place (p. 278) to equal $\sqrt{\frac{S(n_x(\bar{y}_x - y)^2)}{N}}$. There are other questionable points in notation.

A few errors in printing or writing are almost inevitable in mathematical books. The following were observed. On page 20 and page 275, $r = \frac{101.75}{154.6} = 65.8$; and on p. 229, $\sigma_{\text{diff between } x \text{ and } y} = \sqrt{\sigma_{m \text{ of } x} - \sigma_{m \text{ of } y}}$. This should be $\sqrt{\sigma^2_{m \text{ of } x} + \sigma^2_{m \text{ of } y}}$. Also, on page 252 $r = \frac{\Sigma x y}{N \sigma_x \sigma}$. The second σ should have the subscript y.

The book contains nothing on partial correlation. I have always found that beginners get the idea of partial correlation as easily as that of correlation and are quite fascinated with it. Often in social statistics, partial correlation makes otherwise worthless correlation coefficients full of meaning.

An excellent bibliography of educational statistics is included. The statistical bibliography is brief, but I think should certainly contain Pearson's *Tables for Biometricians and Statisticians* which came out in 1914.

William F. Ogburn.

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NEW BOOKS

Aller, C. C. *An industrial survey of Seattle.* (Seattle: Bureau of Industrial Research, University of Washington. 1918. Pp. 64.)

During the first part of 1917 the investigation here presented was conducted by Mr. Aller as research fellow of the University of Washington under the auspices of the Seattle Chamber of Commerce, the Commercial Club and Manufacturers Association of Seattle. Industrial growth is considered under markets, raw ma-

terials, transportation, and manufacturing costs. As far as possible statistical and descriptive data are tabulated around these points.

CLARK, W. W. *A statistical study of 102 truants.* Reprinted from the *Journal of Delinquency,* vol. 3, no. 5. (Whittier, Calif.: Whittier State School. 1918. Pp. 213-234.)

FLORENCE, P. S. *Use of factory statistics in the investigation of industrial fatigue.* Columbia Univ. studies in political science, vol. LXXXI, no. 3. (New York: Longmans. 1918. Pp. 153. $1.25.)

HARRIS, L. I. *A clinical study of the frequency of lead, turpentine and benzin poisoning in four hundred painters.* Reprinted from the *Archives of Internal Medicine,* August, 1918. (Chicago: American Medical Association, 535 North Dearborn St. 1918. Pp. 28.)

HARTLEY, E. F. *Census of the Virgin Islands of the United States, November 1, 1917.* (Washington: Bureau of the Census. 1918. Pp. 174.)

HOFFMAN, F. L. *Army anthropometry and medical rejection statistics.* (Newark, N. J.: The author, Prudential Ins. Co. 1918.)

KNIBBS, G. H. *Commonwealth and demography, 1917, and previous years.* Population and vital statistics bulletin no. 35. (Melbourne: Commonwealth Bureau of Census and Statistics. 1918. Pp. 285.)

Colonies and dominions, from 1901 to 1915. Statistical abstract, 53d number. (London: King. 1918. 2s.)

Statistics of income. Compiled from the returns for 1916 under the direction of the Commissioner of Internal Revenue. (Washington: Supt. Docs. 1918. Pp. 391.)

Resumen anual de estadistica municipal (ano XV, 1917). (Montevideo: Dirección de Censo y Estadistica. 1918. Pp. 346.)

DOCUMENTS, REPORTS, AND LEGISLATION

Reconstruction Problems in Foreign Countries

The official sources of information in regard to the readjustment and reconstruction of the economic life of the countries of Europe may be classed in three groups: the bibliographies, the periodicals giving news items, and the special reports on particular subjects. The special reports have become so numerous that merely to list the titles of the reports of British official bodies would require about ten pages of the REVIEW. The following statement, therefore, is restricted to the official bibliographies and to those official periodicals which give in each issue current information on the subject.

The problem of the reëducation of the disabled soldier, while of the greatest importance, is not included here because of limits of space.

BIBLIOGRAPHIES.—The two most important bibliographies are those published by the United States Department of Labor. One is entitled *Reconstruction: A Preliminary Bibliography,* compiled by Laura A. Thompson (Washington, U. S. Department of Labor Library, 1918, pp. 56, mimeographed). The second is "List of References on Reconstruction," prepared by Mrs. V. B. Turner, and is to be found in the December, 1918, issue of the *Monthly Labor Review* (pp. 47-79).

The Library of Congress published in November, 1918, a *List of British Parliamentary Publications on Reconstruction, with some other Publications.* The Council of National Defense has prepared a *Bibliography on Reconstruction: British Parliamentary Papers and Selected Publications on Reconstruction* (Washington, 1918, mimeographed).

The titles and the terms of references of the British official bodies which have been created to study reconstruction problems are given in a publication of the Ministry of Reconstruction entitled *A List of Commissions and Committees set up to deal with Questions which will arise at the Close of the War* (London, January, 1918, Cd. 8916, pp. 34). This document lists 87 different bodies which are at work on all varieties of subjects: trade, finance, raw materials, scientific research, demobilization, labor, agriculture, public administration, housing, education, legal, aerial transport, etc. The book gives the names of the members of each body, the address, the definition of its field, and the date when a report has been published with the document number of the publication. The list is an impressive exhibit of the care and thoroughness with which the British are attacking the problem.

The Stationery Office of Great Britain published as of date December 31, 1915, a pamphlet entitled *List of Publications issued . . .*

in Connection with Events Arising from the State of War. The printer's mark shows that it went to press in February, 1916. Several supplements have been issued and they contain the titles, etc., of all official documents of the British government on the war.

Official Periodicals Giving Current Information.[1]—The United States Bureau of Labor Statistics, in its *Monthly Review,* publishes many articles, digests of reports, lists of publications, texts of laws, decrees, etc. It is the most important source in this field published in America.

The *Daily Commerce Reports,* published by the United States Bureau of Foreign and Domestic Commerce contain many items of value. They often consist of cable dispatches or of summaries of preliminary reports made to foreign governments, action taken by the larger commercial and industrial organizations, etc.

A very useful summary of news is contained in the *Daily Digest of Reconstruction News,* published by the Director's Office of the Council of National Defense, Washington. It gives important facts about the work of the departments of the federal government in this field, actions of the state and municipal governments, and of foreign governments. Important conferences, congresses, etc., are noted. As the periodical is issued in mimeographed form, only a very limited number of copies are available.

The most important source of information on reconstruction problems in Europe is the fortnightly periodical published by the General Staff of the British War Office entitled *Reconstruction Supplement to the Daily Review of the Foreign Press.* The first issue bears the date September 4, 1917, and the periodical is now in the third volume. Until the issue of August 13, 1918, the title-page of each number bore the notice "For Official Use Only"; but all the issues beginning with this date can now be purchased from the Stationery Office (Imperial House, Kingsway, London) like other official documents, the price of each issue being 6d. net. The information given consists of digests of articles in newspapers, articles in scientific journals, important government announcements, reports of congresses, news items gathered from all over the world, etc.

Great Britain. The Ministry of Labour publishes two monthly periodicals giving news items; the first of these, the *Labour Gazette* is so well known as to need only mention; the second, *The Month's*

[1] In addition to the following titles, a number of confidential and semi-confidential periodicals have been published by foreign governments and by private organizations of employers, which will probably be released in a short time after the peace treaty is formally approved.

Work, gives news of the activities of the various branches of the ministry; the first issue bears the date July, 1918.

The Board of Trade publishes the weekly *Journal of the Board of Trade* which contains important articles on industry, commerce, etc. The *Journal of the Board of Agriculture* (monthly) covers the field of agriculture in the same manner. Both of these journals give digests of parliamentary papers.

The Ministry of Reconstruction is now publishing a series of convenient little pamphlets entitled *Reconstruction Problems*; these are short summaries, of about 25 pages each, and are sold for a few pence each through the usual agents for government publications. An idea of the scope of the pamphlets can be gained from the contents of the one entitled "Raw Materials and Employment" (No. 6). It devotes a few pages to each of the more important industries, such as the metal trades, textiles, boots and shoes, timber, paper. Under each industry is given the amount of raw material consumed annually, the home and the imported supply, the government's regulations of the imports and of production during the war and its announced policy as to these restrictions in the near future, the statistics of the persons employed, the prospects of placing the demobilized troops in these industries, the treatment of the workers in these industries after the return of the troops and the general prospects of the industry in the post-war period. The titles of the pamphlets to date are:

Housing in England and Wales,
Demobilization of the Army,
Raw Materials and Employment,
Housing in Scotland,
New Fields for British Engineering,
Naval Demobilization,
Re-settlement of Civil War Workers,
Land Settlement,
Commercial Forestry,
International Aspects of Reconstruction,
Relations between Employers and Employed,
Adult Education.

A large number of additional pamphlets are in course of preparation.

France. For France, the one indispensable source of information is the *Journal Officiel.* This daily gazette contains reports of Parliamentary committees, action taken by the various departments of the government, laws enacted, decrees issued, etc. During the period of the war, it has been almost the only official source of information concerning the government of France.

The *Bulletin du Travail,* published monthly by the Ministère du Travail, is now devoting much space to reconstruction information in the field of labor, industry, etc. In a similar manner the weekly pub-

lication of the Ministry of Agriculture, *Feuille d'Informations,* gives a wide variety of information, especially as to government action.

Under the terms of the decree published on November 27, 1918, the Ministry of Armament has been transformed into a Ministry of Industrial Reconstruction. As yet no publications have been received from the new ministry, though its decrees, regulations, etc., are quoted in both of the publications noted above. A special ministry has also been created for the development of the war-devastated areas, entitled Ministère des Regions Libérées. Each of these new ministries will undoubtedly issue publications of interest in the near future.

ITALY. The Italian Bureau of Public Information (501 Fifth Avenue, New York City) is distributing to institutions a fortnightly bulletin entitled *Italy To-day.* It covers a wide range of topics, giving a brief statement of important affairs in Italy including reconstruction. It is mentioned here because of the present difficulty in securing Italian publications, arising out of the transportation situation.

The *Gazzetta Ufficiale* covers the usual field of the government gazettes of Europe; reconstruction projects, laws, decrees, etc., appear frequently. The *Bollettino dell'Ufficio del Lavoro* closely resembles the British and French labor bulletins.

HENRY J. HARRIS.

Industries and Commerce

BRITISH FOOD SUPPLY. The seriousness of Great Britain's food question is fully recognized. Both before and during the war various royal and parliamentary committees have been appointed to consider the problem with a view to recommending means of increasing home production or insuring a constant foreign supply. Back in 1903, when war clouds were not altogether visible and before submarine attacks were seriously considered, a royal commission was appointed to inquire into the supply of food and raw materials in time of war.

This commission heard the testimony and recommendations of prominent statisticians, economists, agriculturists, and food merchants. The inquiry lasted over a year. The report as published in 1905 contained in addition to a general discussion of the problem, suggestions as to methods of encouraging both the storage of foreign foodstuffs and the increase in the home production.[1] A supplementary volume to the report contains numerous tables and charts relating to the prices, production, importation, and supply of wheat, flour, meats and other important articles of diet.

[1] *Report of the Royal Commission on Supply of Food in Time of War with Minutes of Evidence,* 1905, Cd. 2643.

Some of the data of the report bring out prominently England's absolute dependence on foreign food products. Thus it was shown that approximately 80 per cent of the wheat and flour consumed was brought from overseas. The danger of this situation is intensified by the small provision for grain storage facilities. These facilities have been steadily decreasing owing to the regularity of food importations. Only at rare intervals during the two decades previous to 1905 were the British port stocks of wheat (as reported in *Broomhall's Corn Trade Year Book*) sufficient to furnish a month's consumption. The commission estimated that the ordinary reserves held by farmers and converters, except at periods of harvest, could hardly be more than the average of the visible supply, so that a two months' cessation of British foreign trade would mean a bread famine. The maintenance of wheat reserves in port granaries had become unprofitable because imported grain could be unloaded directly at the dock without the payment of storage charges, and, since importations could be had at all seasons throughout the year, there was no need of consumers buying the stored grain. The commission considered in its recommendations the question of supplying free port storage for incoming grain, but nothing seems to have been ever attempted along this line.

Following the outbreak of war in 1914, the maintenance of the British food supply became a condition and not a theory. It was not until the inauguration of the intensive submarine warfare in the summer of 1916, however, that serious measures for food conservation had to be taken. The first food control act was passed by Parliament on November 16, 1916, and a food controller was appointed December 26, 1916, with powers similar to those Congress conferred on Mr. Hoover. Later, shortage of flour became so serious that the flour mills in the United Kingdom were taken over by the government on April 20, 1917.[2] During this period of food legislation, several royal and parliamentary commissions had been appointed to consider food questions. A Dominions' Royal Commission reported in November, 1915.[3] This report contains some very interesting and instructive data relative to the sources of British food. It is shown that Canada, Australia, and Argentina are gradually replacing the United States as England's granary. From her own overseas dominions before the war the following percentages of total wheat imports were received:

2 *"Food Supply Manual,"* published by authority, London, May, 1917.

3 *Final Report of the Royal Commission on the Natural Resources, Trade and Legislation of Certain Portions of His Majesty's Dominions.—Memorandum and Tables relating to the Food and Raw Materials Requirements of the United Kingdom, November, 1915.* Cd. 8123.

Period	Canada	Australia	India	Total per cent
1901-5	9.2	5.9	13.9	29.0
1906-10	15.1	8.2	11.7	35.0
1911-13	20.5	10.6	18.0	49.1

In the two years preceding the European war, Great Britain received approximately one half of her wheat imports from her principal overseas possessions. Her other chief wheat producer is Argentina, which in five years previous to the war furnished her with 30 per cent of the wheat imports.

Great Britain is less dependent on overseas for her meat than for her wheat supply. During the decade previous to the war, 40 per cent of the meat consumed was imported. The following table shows the pronounced change in the source of this supply:

Per Cent of English Beef Imports

From	1901-5	1906-10	1911-13
Australia	2.3	5.0	12.2
Argentina	32.6	60.0	80.5
United States...........	60.5	25.0	1.2
Other	4.6	10.0	6.1
Total	100.0	100.0	100.0

The most remarkable feature here is the elimination of the United States as a British meat purveyor. Argentina, in all probability, will continue to furnish for some time the bulk of foreign beef consumed in Great Britain.

Facing the serious food shortage brought about by Germany's submarine warfare, British statesmen naturally turned their attention to the problem of increasing home production. A departmental committee appointed by the president of the Board of Agriculture and Fisheries to consider the production of food in England and Wales, issued a final report in the fall of 1915.[4] This committee, of which Lord Milmer was chairman, strongly recommended an increase in tillage. It was shown that during the forty years previous to the war, four million acres of arable land had been permitted to go to grass. This could be readily resown to cereal crops. In addition, tilled land could be made more productive by the application of inexpensive fertilizer such as furnace slag, and the use of labor saving machinery. "More pigs" is not the least serious recommendation of the commis-

[4] Dated October 15, 1915 (Cd. 8095).

sion. Another suggestion was the more effective use of the Small Holdings and Allotments act of 1908, which permits a borough council to compulsorily acquire, after six months' notice, any arable, untilled land for the purpose of encouraging land settlement.

Another interesting British report in relation to food supply is that issued by a committee of the Royal Society.[5] This committee was composed of prominent physiologists and chemists who were concerned chiefly with the nutritive qualities of food. They recommended the diversion of cereals as much as possible to human consumption. They concluded also that it was uneconomical to fatten sheep and cattle before slaughtering or to feed pigs and poultry on any other than waste foods.

In the consideration of reconstruction problems, the future home food supply had not been neglected in Great Britain. In August, 1916, a Sub-committee on Agricultural Policy was appointed to consider methods of increasing home production. A preliminary report of this committee was published in 1917 and a full report was issued early in 1918.[6] It is probably the most interesting of all the British reports relating to food supply. The problem is considered historically and is treated largely from an economic viewpoint. The decline in British agriculture during the last fifty years is ascribed to the repeal of the Corn laws and to the importation of cheaply produced foreign foods. A new agricultural policy is needed to increase home production. Better methods of tilling, more intensive cultivation and the use of better seeds is recommended. Agricultural education should be fostered. Grass lands should be ploughed up and converted into arable land as much as possible, since it is more economical to feed cattle on cultivated soil.

There is nothing new in these suggestions, and the report of the committee would be without special interest were it not for the recommendation of the reëstablishment of county minimum wage boards to regulate agricultural wages. There is also the suggestion of a land court to adjust agricultural rents. In considering these problems, the report enters into a discussion of economic theories. The majority of the committee concludes that rent is largely interest on improvements invested in the land. "Low rents have too often resulted in slack farming and to secure the farmer in those rents would in such cases only leave him with his unprogressive methods" (p. 23). Accordingly

[5] *The Food Supply of the United Kingdom. A Report Drawn up by a Committee of the Royal Society at the Request of the President of the Board of Trade.* London, 1917, Cd. 8421.

[6] Cd. 8506, dated February 20, 1917, and Cd. 9029.

the three F's—fair rent, fixity of tenure, and free sale—are urged for adoption as a basis of agricultural land policy.[7]

A. M. Sakolski.

The Bureau of Foreign and Domestic Commerce, of the United States Department of Commerce, has issued the following:

Special Agents Series:

No. 170, *Motor Vehicles in Japan, China, and Hawaii,* by T. O. Jones (pp. 75).

No. 171, *Brazilian Markets for Paper, Paper Products, and Printing Machinery,* by R. S. Barrett (pp. 77).

Miscellaneous Series:

No. 73, *Economic Reconstruction. Analysis of Main Tendencies in the Belligerent Countries of Europe with Statistics of Production, Consumption, and Trade in Important Foodstuffs and Industrial Raw Materials* (pp. 74).

No. 75, *Statistics of German Trade 1909 to 1913* (pp. 71).

The United States Department of Agriculture has compiled a bulletin on *Potatoes: Acreage, Production, Foreign Trade, Supply, and Consumption,* by George K. Holmes (Bull. No. 695, Oct. 16, 1918, pp. 24).

In the *Annual Report of the Federal Trade Commission for the Fiscal Year Ended June 30, 1918* (Washington, 1918, pp. 131) brief summaries are made of the work during the past year, particularly in determining costs of production of commodities for the War and Navy Departments, War Industries Board, and other branches, also concerning the meat investigation and the work of the commission in enforcing the law against unfair methods of competition.

Part II of the commission's report on the *Meat-Packing Industry* (1918, pp. 290) contains evidence of combination among packers. Chapter I is on The history of the dressed-meat pools and mergers; chapter 2, How the meat combination works now; chapter 3, Agreements in other lines of business; chapter 4, The bankers and the combination.

The report on the *Canned Salmon Industry* will soon appear and will contain information of interest to economists concerning the economies of large-scale production and concerning marketing.

[7] The following are some of the recent books relating to food supply published in England: Christopher Turner, *Our Food Supply,* London, 1918; George Radford, *Our Daily Bread,* Constable, 1918; T. A. Wood, *The National Food Supply in Peace and War.*

Export Trade Policy of the United Kingdom, 1913-1918 (Washington, War Trade Board, Bureau of Research, pp. 60) presents data regarding fourteen groups of commodities important in the export trade of the United Kingdom with comparisons with United States exports. The significance of the study lies in the presentation not only of the actual changes in current prices but in showing what the changes would have been if the prices of 1913 had been maintained. "In terms of current prices, the total United Kingdom exports of 1917 were about 94 per cent . . . of the total of 1913. But prices have risen so rapidly that these figures are misleading. If prices had not changed since 1913, the exports for 1917 would have been approximately 45 per cent. . . . During the same period United States exports have increased about 150 per cent in terms of current prices. In terms of 1913 prices the approximate increases for the United States were 75 per cent in 1917." Comparisons are also made in terms of quantity wherever possible.

The United States Tariff Commission has submitted to the Senate a report on *Free Zones in Ports of the United States* (pp. 92). It relates to bills dealing with plans for establishing free ports such as have been created in Hamburg and Copenhagen and discusses the defects of bonding and drawback, the inadequacy of the present system, the importance of transshipment trade, the advantages that might be derived from a free-zone system. In the appendix are reports of various chambers of commerce and commercial organizations, extracts of hearings, and various miscellaneous matter relating to the topic of the report.

It is announced that there is to be a revision of the foreign trade statistics which are published by the Bureau of Foreign and Domestic Commerce. More than 1,000 new items will be added to the export classifications and there will be some increase also in the number of import items shown. The object is to secure a common classification for import and export figures.

The bulletin of the United States Food Administration for November 15, 1918, contains Mr. Hoover's statement on food control and prices (pp. 4-7).

A letter of the Director of the Bureau of Mines on *Production of Crude Oil* has been published as Senate Document No. 280, 65th Congress, 2d Session (pp. 16).

The Agricultural Experiment Station of the University of Wisconsin has issued a bulletin on *Price-Fixing and Cost of Farm Products*, by Professor H. C. Taylor (Madison, pp. 16).

The *Report of the State Land Settlement Board of California* (Sacramento, 1918, pp. 80) is of unusual interest. It describes the systematic plan of rural development which has recently been put into operation. Financial tables are given and also a map of the Durham settlement.

The Board of Trade Committee, London, has made a report on *Commercial and Industrial Policy after the War* (9035, Wyman, 9d.), being the final report of the committee; and also reports on the position of the coal trade after the war (9093, 4d.), of the engineering trades (9073, 6d.), of the iron and steel trades (9071, 6d.), of shipping and the shipbuilding trades (9092, 1s. 3d.), and of the textile trades (9070, 1s. 3d.).

Corporations

THE ANNUAL REPORT OF THE INTERSTATE COMMERCE COMMISSION for 1918 is the first report of the commission under the federal control of railroads by the President's proclamation of December 26, 1917, and the federal control act of March 21, 1918. The report is of more than usual interest in view of the pending disposition of the railroads. It gives an account of the transition to federal control and points out in what manner the federal control act has affected the act to regulate commerce. General Order No. 1 of the director general, authorizing the disregard of established routes, superseded the fifteenth section of the act to regulate commerce in so far as it had previously protected carriers from being short hauled and had given the shipper the right to route the movement of his freight. The same order also superseded section 3 of the act to regulate commerce so far as it protected carriers in the exclusive right to the use of their tracks or terminal facilities. Section 10 of the federal control act provides that the commission shall not suspend, pending final determination thereon, rates or fares initiated by the President; and that rates and fares initiated by him shall become effective at such times and on such notice as he directs, thus superseding the provision of section 6 of the act to regulate commerce, (which requires statutory notice of thirty days except where the commission allows changes upon shorter notice), and of section 15 which precludes the filing of an increased rate of fare except after approval thereof by the commission. Some cases are cited and briefly discussed in which the commission claimed and exercised the power to review rates initiated by the director general. The commission suggests, too, that if it be assumed that the power of the President over rates applicable wholly within a state is not inhibited by section 15 of the federal control act the question arises whether the jurisdiction of the com-

mission has not been extended by section 10 of that act to include a review of state rates so initiated.

The commission does not consider the present an opportune time "in which to recommend concrete proposals for legislation"; it states that it will "at an appropriate time report to Congress such information, suggestions or recommendations" as it believes may be of assistance "in solving the many and difficult transportation problems." The commission contends, however, that whatever line of policy is determined upon the fundamental aim should be to provide a transportation system adequate to needs both in normal times and in times of national stress or peril. To this end it urges adequate provision for "merger within proper limits of carriers" lines and facilities in such part and to such extent as may be necessary in the general public interest to meet reasonable demands of our domestic and foreign commerce; "prompt merger without friction of all carriers' lines, facilities and organizations into a continental and unified system in time of stress or emergency"; limitation of railway construction to the necessities and convenience of the government and the public and *"assuring construction to the point of these limitations"* (not in italics in report); development and encouragement of inland waterways and coordination of rail and water carriers.

The commission believes that railway operation should be emancipated from financial dictation if private ownership and operation are to be resumed; that there should be regulation of issues of securities and establishment of a relationship between federal and state authority which will eliminate the twilight zone of jurisdiction and under which a harmonious rate structure can be evolved and adequate service secured; effective supervision of carriers' policies toward competitive and non-competitive traffic; provisions requiring each road to furnish its quota of rolling stock; means for securing equitable distribution of railway equipment; and a more common and efficient use of terminals. The commission indicates that should the policy of government ownership be adopted there would need to be consideration of the fair price under which the roads would be acquired; adequate safeguard against operation of the carriers as a fiscal contrivance; provision that the advantages of large-scale production in transportation would be realized and the roads made self-supporting; responsibility and relationship of the railway managers to Congress; the problem of making railroad work attractive so as to insure selection of able men; and finally provision for a tribunal for the determination of controversies under public operation.

It is to be hoped that the commission's belief will be generally ac-

cepted that certain lines of inquiry "must be pursued in order to reach sound conclusions." It would appear that the question of transportation deserves as careful consideration as was given to our banking system before the roads are turned back to their owners under some modified form of government regulation or taken over through government ownership. C. O. RUGGLES.

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The *Statement of the Director General of Railroads, Mr. McAdoo, before the Interstate Commerce Committee of the Senate,* January 3, 1919, has appeared as a separate (pp. 41).

The Division of Bibliography of the Library of Congress has prepared a typewritten *List of References on the Government Ownership of the Telegraph and Telephone* (pp. 15).

The Railway Business Association (30 Church St., New York) has the following pamphlets for circulation: *Future of Our Railways,* by Alba B. Johnson, an address delivered January 9, 1919 (pp. 14); *President Wilson and the Railways* (pp. 18); and *Common Sense about Railways,* by Harry H. Merrick (pp. 14).

Public utility reports received are:

Reports of the Board of Public Utility Commissioners of New Jersey, Volume V, January, 1917 to February, 1918 (Trenton, pp. 866).

Sixth Annual Report of the Public Utilities Commission of Rhode Island for 1917 (Providence, pp. 124).

Labor

Recent bulletins of the Bureau of Labor Statistics of the United States Department of Labor are:

No. 232, *Wages and Hours of Labor in the Boot and Shoe Industry: 1907-1916* (Washington, May, 1918, pp. 169). There is a considerable amount of descriptive matter relating to the character of occupations, with charts showing outline of processes.

No. 234, *The Safety Movement in Iron and Steel Industry, 1907-1917,* by L. W. Chaney and H. S. Hanna (June, 1918, pp. 299). This continues the previous study published by the bureau in 1913 with regard to accidents in the iron and steel industry, covering the period 1907-1910. Part 1 contains a review of the course of accidents with special reference to the effects of the war on accident occurrence. Part 2, on causes and prevention of accidents, includes chapters on accident rates, nature of injury, and the human factor in accident occur-

rence, and gives charts illustrating experience in different kinds of mills.

No. 244, *Labor Legislation of 1917* (August, 1918, pp. 430). The usual text of state laws with a preliminary analysis under topics.

No. 246, *Decisions of Courts Affecting Labor, 1917*. The review of decisions includes labor organizations, alien labor, employers liability insurance, strikes, wages, etc.

The Industrial Relations Committee of the Emergency Fleet Corporation (Philadelphia) has reprinted in a pamphlet *Reports on Reconstruction from English Sources,* including the two reports of Joint Standing Industrial Councils (Whitley report), the memorandum proposals of the Whitley report, the report on Works Committees, and the report on Conciliation and Arbitration.

The *Monthly Labor Review* of the United States Department of Labor Statistics for October, 1918, contains an article on "Labor turnover and employment policies of a large motor vehicle manufacturing establishment," by Boris Emmet.

The librarian of the United States Department of Labor Library (Washington), Miss Laura A. Thompson, has compiled a typewritten bibliography of 57 pages on *Reconstruction,* covering 415 articles and publications. A large part of this refers to English proposals and plans in regard to new labor programs.

One of the chapters in the *Annual Report of W. G. McAdoo, Director General of Railroads, 1918,* relates to labor (Washington, pp. 27). It gives an account of the work of the division of labor and of the railway boards of adjustment. There is also a discussion of the employment of women in railway service.

The *Forty-eighth Annual Report on the Statistics of Labor* for the year 1917 published by the Bureau of Statistics of Massachusetts contains a directory of labor organizations in Massachusetts, report on the union scale of wages and hours, collective agreements, and labor legislation in Massachusetts, 1915, 1916, and 1917.

Bulletin No. 17 of the Minimum Wage Commission of Massachusetts relates to *Wages of Women in Hotels and in Restaurants in Massachusetts* (Boston, 1918, pp. 68) and presents tables showing wages.

The Bureau of Statistics and Information of the Industrial Commission of New York has issued *Labor Law with Amendments, Additions and Annotations to August 1, 1918* (Albany, pp. 187); *Miscellaneous Labor Laws, 1918* (pp. 136); and *Industrial Code* (pp. 47).

The *Twenty-sixth Annual Report of the Maryland State Board of Labor and Statistics* for 1917 (Baltimore, Equitable Bldg., pp. 241) devotes considerable space to the child labor law (pp. 17-99) and to the report on the enforcement of a ten-hour law for women (pp. 113-156). Brief reference is also made to the compulsory employment act of 1917.

The *Ninth Biennial Report of the Department of Commissioner of Labor and Industrial Statistics of Louisiana,* 1916-1918 (New Orleans, 1918, pp. 166) contains paragraphs (pp. 16-18) on the exodus of negro labor from that state during the last two years.

The Industrial Commission of Wisconsin has issued its second annual report on *Apprenticeship in Wisconsin* covering the period January 1, 1917, to June 30, 1918 (Madison, pp. 12).

The American Federation of Labor has published in pamphlet form its *Reconstruction Program* (Washington, pp. 16).

The Red Cross Institute for Crippled and Disabled Men (311 Fourth Ave., New York) has published a pamphlet on *Employment Opportunities for Handicapped Men in the Coppersmithing Trade,* by Bert J. Morris, which contains chapters on employment opportunities and a brief discussion of the economic aspects of the coppersmithing industry.

Money, Prices, Credit, and Banking

WATCHING THE MOVEMENT OF PRICES DURING THE WAR. Now that the war boards are breaking up, and the problem of resuscitating the peace industries looms to the fore, economists are concerned particularly to know which of the war statistical materials can be made useful for other than war ends. Not the least permanent in value, of all the data assembled purely for war purposes, are the records of the prices of commodities at wholesale collected by the Price Section of the Division of Planning and Statistics of the War Industries Board. That section, while feeding price materials to the Price-Fixing Committee and other governmental agencies at Washington, has brought together, under the direction of Dr. Wesley C. Mitchell, of Columbia University, a more comprehensive set of price quotations than has hitherto been gathered. These price statistics are so distinctly a contribution that analysts will for many years make them the basis of their studies of the movement of prices during the war.

The Price Section, in common with other sections within the several divisions of planning and statistics of the war boards, was created

to serve a special need. It was assigned the task of answering all inquiries relating to the fluctuations of wholesale prices which the price-fixing committee or the war boards had to ask it. No effort was made to examine retail prices, because the government regulations and the government purchases pertained almost exclusively to wholesale prices. In response to these inquiries, and by reason of several important studies which the section undertook upon its own initiative, the War Industries Board has built up a file of prices on more than one thousand commodities at wholesale in the United States and made a significant start in a smaller file of similar prices in the foreign countries. All of these files have been collected with a view toward giving a general picture of the price movement of representative commodities within one or another of the seven major groups—Food; Clothing; Rubber, Paper, Fiber; Metals; Building Materials; Fuel; and Chemicals.

Government officials, charged with the controlling or the fixing of war prices, have been concerned quite as much with previous as with current quotations. The quotation records of the Price Section, therefore, were made to extend back through the war period and to the beginning of 1913. These quotations are averages, in the main, of samples taken at regular monthly or weekly intervals from the leading trade journals, from private sources and from constituted government bureaus. Of the latter, by far the greatest acknowledgment of indebtedness is owing to the Bureau of Labor Statistics. But these series of actual quotations make up half the record only. For each monthly actual quotation there has been figured a corresponding relative price upon a fixed base. This then makes possible readily a comparison of the relative fluctuations during the war of wheat per bushel, copper per pound, and pig iron per ton, and, what is as valuable, shows at a glance how each of those commodities has moved with reference to its base. These relative prices, which are tabulated with their actual prices, were made to represent the percentages of rise or fall of the actual prices from the pre-war level. The average quoted price for the year immediately preceding the outbreak of the European war (July 1, 1913, to June 30, 1914) was taken as a base equal to 100 in figuring the relative prices.

It is not here permitted to discuss in detail the numerous reports that were made confidentially. But there were several lines of price service rendered the war boards which, while not widely distributed, have not been strictly confidential. Of these services the economists ought to know. They are the *Book of Charts*, the series of *Price-fixing*

Bulletins, the *Bulletin of Monthly Prices during the War,* the *Comparison of Prices during the Civil War and Present War,* the *Comtuations of Controlled and Uncontrolled Prices,* and the study of foreign prices. There is, too, under way a very comprehensive plan to write a *History of Prices during the War* about which economists, business men, and officials will want to know.

The *Book of Charts,* which was given only to the President and a selected list of the more important officials in Washington, is an ingenious device planned by Dr. Mitchell to facilitate the comparison of the relative prices of the eighty-eight leading commodities contained between its covers and of the group and "all commodities" index numbers from the Bureau of Labor Statistics. There are then just ninety-eight charts in the book. Each chart folds down away from the book. Since the paper is translucent, a comparison of the price fluctuations of any two or three charts may be readily made by folding down and super-imposing the one chart upon the other and reading upon the top chart the lines which show through from the charts beneath. This quite unique contrivance, calculating the combinations of three in ninety-eight, makes possible 152,096 distinct comparisons.

It is interesting to note the degrees of fluctuation which are found within this selected lot of eighty-eight representative commodities. One may find instances of most of the various percentages of fluctuation lying between the extreme low of rubber, which remained, in the main, well below its pre-war level and the extreme high of quicksilver, which early in 1916 shot to a point representing 723 per cent above its pre-war level. This jump (from $.55 to $4.00 per pound), taking the pre-war level as 100, amounted to an advance in price seven and one quarter times greater than that prevailing before the war. But, excepting coffee, few other commodities remained relatively as low as rubber and few advanced relatively as high as quicksilver. Rubber, in the raw material as contrasted to the manufactured product state, remained low because, despite the increased demand, there was an abundance of production. Before the war, the world depended for rubber primarily upon Brazil where it grew wild. But in 1913, the Ceylon and other rubber plantations, which had been long under cultivation, began producing in quantities so large that now the plantations produce 240,000 tons of rubber per year. The Brazil production has remained about 40,000 tons, which before the war represented the bulk of the world production. This and the cutting off of a heavy importation of rubber into Germany were bound to have their effect in hold-

ing down the price of crude rubber. The phenomenal rise in quicksilver, which held for two months only before there came a sudden drop, was a freak. The spurt was prompted by a rumor that the supplies from Spain, which is a chief source, would be cut off by England. This news was spread at a time when there was demand from abroad for quicksilver to be used as fulminate.

This short review does not purport to make any generalization on the movement of prices as recorded in the *Book of Charts,* much less on the movement of all prices during the war. The examples of rubber and quicksilver are cited simply as interesting exceptions. Perhaps of the two, rubber is the more exceptional. The movement in general was toward a high point. One cannot turn through this series of war prices without having it impressed upon him, indeed, that the great bulk of commodities have doubled in price during the war and that many of them have trebled.

In addition to the charts of relative prices, the book contains corresponding actual prices for each commodity and, where available, figures showing production, imports, exports, stocks on hand, price fixing, restriction of imports and exports; and commercial histories purporting to explain the reasons for the fluctuations of each article.

The *Price-fixing Bulletins,* which were a joint effort of the price and editorial sections, constitute two distinct series—those pertaining to the market prices of commodities under control and those pertaining to the price regulations of government agencies. It was the purpose of these series to give the war boards what had not been given before—an edited compilation of all the regulations made from time to time on various groups of controlled commodities and a carefully prepared compilation of the market quotations during the war period of those and closely related commodities. There have been prepared bulletins on the non-ferrous metals, rubber, chemicals, rags, iron and steel, building materials, cordage fibres, fertilizer, and wool of the market quotations series; and bulletins on the non-ferrous metals, rubber, chemicals and explosives, rags, lumber and building materials, manganese, platinum metals, textiles and fibers, paper, iron and steel, and fuels of the price regulation series.

The *Bulletin of Monthly Prices during the War,* issued each month, is intended to show market fluctuations in the prices of about one hundred commodities at wholesale. The particular list of commodities that are carried in this bulletin has been chosen to represent, as nearly

as may be in a limited selection, the price movement during the war and the current prices of typical commodities within the seven major groups into which the Price Section classifies all commodities.

The present distribution among the several groups of the individual commodities which are quoted in this bulletin is as follows: the Food group (bacon, bananas, barley, beef, butter, cattle, coffee, corn, eggs, wheat flour, hay, hogs, lard, lemons, malt, milk, mutton, oats, potatoes, poultry, rice, rye, salt, sheep, sugar, tea, tobacco and wheat); the Clothing group (calf-skins, cattle hides, cotton, cotton yarns, sole leather, print cloths, silk, suitings, wool and worsted yarns); the Rubber, Paper and Fibre group (binder twine, hemp, jute, paper, rubber, sisal, and wood pulp); the Metals group (aluminum, antimony, copper, iron ore, pig iron Bessemer, pig iron Foundry No. 2, lead, nickel ingot, quicksilver, steel billets, tin, and zinc); the Building Materials group (brick, Portland cement, flaxseed, window glass, carbonate of lead, lime, linseed oil, ash, Douglas fir, gum, hemlock, oak, North Carolina pine, yellow pine, pine tar, and oxide of zinc); the Fuel group (anthracite coal, bituminous, coal, semi-bituminous coal, Connellsville coke, crude petroleum, refined petroleum, and tallow); and the Chemicals group (grain alcohol, wood alcohol, cocoanut oil, cottonseed oil, lubricating oil, quebracho, nitrate of soda and sulphuric acid).

In addition to the tabulations of actual and relative prices of each of the above listed commodities for the period of January, 1913, to date, there are included in the *Bulletin of Monthly Prices during the War* charts of the relative prices of the more important commodities.

One of the most interesting of all the special reports made by the Price Section, and one made upon its own initiative, was a *Comparison of Prices during the Civil War and Present War.* That bulletin is a tabular comparison of the relative prices of ninety-two identical commodities at wholesale during the Civil War (1860-1866) and the present war (1913-1918). The actual price for January, 1860, was taken as a base equal to 100 in figuring the relative prices for the Civil War period and the average actual price from July 1, 1913, to June 30, 1914, as a base equal to 100 in figuring relative prices for the present war period. These two bases were taken as fair representations of the respective pre-war prices. Quite the most interesting studies in this report are the two series of the medians of the relative prices of the ninety-two commodities as a whole during the two war periods. These medians would seem to indicate that prices during the Civil War rose more irregularly and somewhat higher relatively than during

the present war. There is withal, however, a striking similarity in the general upward movement of prices during the two wars.

It remains yet for the Price Section to issue a bulletin, now all but complete, showing the *Fluctuations of Controlled and Uncontrolled Prices*. There have been many people eager to know how effective price-fixing has been. This bulletin will not attempt to settle that question. It will give some valuable general suggestions toward such an inquiry. The great bulk of commodities that have been controlled are included in the various group and "All Commodities" index numbers of the Bureau of Labor Statistics. In order, therefore, to determine roughly the effect of price-fixing upon the movement of prices during the last year and one half of regulation in this country, the weighted index numbers of the Bureau of Labor Statistics have been recast in order to show a weighted index number of commodities that have been controlled and one for those which have not been controlled. This involved the task of separating the controlled commodities from the uncontrolled in the "All Commodities" and nine group index numbers and recalculating a new index number for controlled prices and one for uncontrolled prices in each group. The new index numbers are being made from weighted aggregates of actual prices turned into relative prices on the base of the year immediately preceding the first date of price-fixing (August, 1916, to July, 1917). The results of this comparison, which have not yet been made known, leave no doubt that prices within a group became distinctly more stable after price-fixing set in than before.

Foreign prices have seldom, if ever, borne as directly upon domestic prices or been thrown themselves as generally under similar pressures as since the outbreak of the war in Europe. The domestic and the foreign market, each at bottom controlled by the military situation, have been enough akin to make war boards commonly choose to study the one in relation to the other. Unfortunately the sources for foreign prices are not readily accessible and frequently not available. In especial are they not, for complete series from the Central Powers. It was possible, by use of cable, consular reports, and foreign periodicals, however, to gather series that were more or less complete from England, France, Italy, Russia, Germany, Austria, Australia, New Zealand, India, Canada, Norway, Sweden, Holland, Switzerland, Japan, and Spain, and Brazil. The separate studies for those individual countries, including each between 48 and 105 commodities, show quotations by months from January, 1913, through December,

1918. Each lot of foreign prices is classified, like the domestic, under one or the other seven major groups (food; clothing; rubber, paper, fibers; metals; building materials; fuel; and chemicals) and for each series of actual prices there has been figured a corresponding series of relative prices. The average actual price for the year immediately preceding the beginning of the war (July 1, 1913, to June 30, 1914) was taken as a pre-war base, and made equal to 100, in figuring the relative prices.

The real contribution of this particular study lies in the comparison, which it promises to afford, of the relative prices of various lists of commodities in each of the seventeen foreign countries with identical lists of commodities at domestic markets. There have been found, for example, 150 series of identical commodities which represent a corresponding movement upon the same pre-war base, of wholesale prices in the United States. So with each other foreign and corresponding domestic series. The comparison of domestic and foreign fluctuations of commodities at wholesale, not yet completed, will be of wide interest here and abroad.

But now that the war is over, and the demands from the war boards for purely routine service are not the paramount ones, there remains the still more difficult and necessary task of interpreting this great body of data. There is a tremendous concern now, while the policies of the future are in the making, to know in a more comprehensive way than has been known how prices generally have moved and how particular groups of prices have moved. And so the War Industries Board has directed its Price Section to write within the course of the next few months a history of prices during the war. A start has already been made upon that task and at the expiration of that board on December 31, 1918, was continued by the same section operating within the War Trade Board.

The first and most prodigious problem involved in the writing of such a history is, of course, the setting up of a classification of commodities that will lend itself to the widest uses. There are now constituted seven major groups and sixty-six classes as a basis for such a classification as follows:

I. Food Group:

1. Wheat and products
2. Corn and products
3. Barley, rye, hops, and products
4. Oats, buckwheat, and rice
5. Feed, fodder, and hay
6. Fruits, berries, and products
7. Vegetables and truck
8. Sugar, cane and beet
9. Tea, coffee, and cocoa
10. Spices and condiments
11. Nuts, oils, and butter (veg.)
12. Tobacco
13. Fish and sea foods
14. Livestock, meats, fats, and poultry
15. Dairy products

II. Clothing Group:

16. Cotton	20. Hides and skins
17. Wool	21. Leather
18. Silk	22. Buttons
19. Hair, bristles, and feathers	23. Fur products

III. Rubber, Paper, Fibres, and Plastics Group:

24. Rubber	26. Fiber
25. Paper	27. Plastics

III. Rubber, Paper, Fibers, and Plastics Group:

28. Iron and steel	30. Non-ferrous metals
29. Ferro-alloys	31. Rare metals

V. Fuels Group:

32. Coal	34. Matches
33. Petroleum	

VI. Building Materials Group:

35. Sand and gravel	39. Glass
36. Quarry products	40. Lumber
37. Brick and tile	41. Naval stores
38. Cement	42. Waxes, putty

VII. Chemicals Group:

43. Acids	50. Paints and varnishes
44. Heavy chemicals	51. Fertilizers
45. Miscel. inorganic chemicals	52. Essential oils
46. Miscel. organic chemicals	53. Fermentation products
47. Natural dyestuffs, tanning extracts and mordants	54. Soaps and glycerine
48. Coal tar—crudes, intermediates and dyes	56. Explosives
49. Wood distillation products, turpentine and rosin	57. Inks

The presentation of the actual and relative prices from January, 1913, through December, 1918, by simple arithmetic averages alone will not constitute the background of this price record. Such a record would not apportion to each set of commodities its just weight in the system of prices. There will be constructed accordingly, a series of weighted index numbers for each class, each group and for "all commodities." It is planned to use a double set of weights—the "commodity weights" to give each commodity within a class its due influence upon the index number for that class and the "class weights" to give each class of commodities within a group its due influence upon the index number of that group. Since the task at hand is a study of war prices, it seemed desirable, despite the difficulties involved, to choose a year in weighting which would rate the commodities according to their relative importance on a war basis. A choice of 1917 as the basic year was therefore made. The weights will consist of the estimated amount of each article or class which entered into trade in this country during that year.

There would appear few doubts, valuable as have been the price

studies directed in the past by the War Industries Board toward war ends, that there lies ahead even a broader field of service for the Price Section than any it has performed. Wholesale prices have been collected before but seldom studied as units in a system of prices. Men with business points of view, either as investors or students, formerly have not found in the general index number a tool sufficiently delicate accurately to measure prices within specific industries. It has been adequate to measure general trends only. But if an index number is to be made a useful price barometer for the business man, as well as the economist, it must record separately the movement of prices within each of the narrower fields of industry. The making of a weighted index number of one thousand commodities at wholesale, one to include a distinct series for each industrial division, will give a firmer body of data for such price inquiries than has ever been made in this or any country. It is that task which the price group at Washington have set out to complete.

Washington, D. C. PAUL WILLARD GARRETT.

INVESTMENTS IN LATIN AMERICA. In a recent report of the federal Bureau of Foreign and Domestic Commerce upon *Investments in Latin America and the West Indies* (Special Agents Series No. 169, 1918, pp. 544) Special Agent Frederic M. Halsey covers a broad field and brings in compact form to the study of foreign trade and foreign investment a compilation of material which hitherto has not been easily accessible. The importance of investment in foreign countries as a means of developing foreign trade connections and goodwill for the investing country has furnished the motive. The report made is one dealing with facts, confining itself to present effort and past accomplishment rather than attempting speculation as to the future.

The various countries in South and Central America, beginning with Argentina, are studied separately. The scope and magnitude of foreign investments and state, federal, provincial, and municipal finance of each country are analyzed. Banks and banking facilities, both of the country itself and its connections with foreign countries, receive attention. Important industrial and financial facts are given concerning the railways and public utilities of each country, also brief descriptions of the main classes of industries in each state, including forestry, agricultural, manufacturing, and commercial undertakings. Extensive appendices give many supplementary facts as to numerous enterprises which are discussed in the text, with brief accounts of companies' activities and data upon international enterprises.

From the student's point of view, the report suffers from a failure

to state the source of many of the facts presented and from the failure to make any general conclusions as to the extent and character of investment in South America or Latin America as a whole.

HARRY R. TOSDAL.

The Federal Reserve Board published in the December issue of the *Federal Reserve Bulletin* the text of the first interim report submitted to the British parliament by Lord Cunliffe's committee, which was appointed to consider problems relating to currency and foreign exchange during the period of reconstruction.

The American Institute of Bankers (5 Nassau St., New York) has published in its *Bulletin* an article on the increase of savings deposits in banks by states in the years 1914 and 1918 and per capita calculations.

A reprint has been prepared of the proceedings of the savings bank section of the American Bankers Association on the topic *Is the Short-Time Liquid Security an Essential to the Proper Operation of the Savings Bank?* It contains a discussion with an analysis of banks and savings institutions in the United States, August 1, 1918, with charts (Milton W. Harrison, secretary, 5 Nassau St., New York, pp. 45).

The Industrial News Survey continues its study of prices with a cost of living supplement on *Wartime Increases in the Cost of Living,* July, 1914, to November, 1918 (15 Beacon St., Boston, pp. 7).

There have recently been received:

Proceedings of the Kansas Bankers Association, 1918 (W. W. Bowman, secretary, Topeka, pp. 237).

Proceedings of the Twenty-third Annual Convention of the Maryland Bankers' Association (Charles Hann, secretary, First National Bank, Baltimore, pp. 114).

Recent state banking reports received are:

Eleventh Annual Report of the Bank Commissioner of Rhode Island (Providence, 1918, pp. 221).

Twenty-third Annual Report of the Commissioner of Banking of Wisconsin (Madison, pp. 489).

Twelfth Report of the State Banking Department of Louisiana for 1916 and 1917 (New Orleans, pp. 213).

Public Finance

STATISTICS OF INCOME, for 1916, compiled under the direction of the Commissioner of Internal Revenue (Washington, 1918, pp. 391) con-

tains elaborate tables relating to both corporate and personal income. The latter are analyzed from the standpoint of class distribution, occupations, returns by states and by source, whether from personal service or property. For example, it is possible to determine how many taxable incomes are assigned to teachers (inclusive from kindergarten to university, school, and college officials) by each state and to calculate the per cent of such returns to total returns. From these returns derivative tables can be compiled comparing different states. For example, Michigan and New Jersey, which in 1916 were nearly equal in population, compare as follows:

	Population	Number of returns by teachers	Net income	Income tax, normal and additional
Michigan ...	3,054,854	31	$201,115	$457
New Jersey.	2,948,017	186	1,284,692	7,884
U. S........	103,559,093	2,919	19,345,751	117,961

New Jersey has six times as many returns as Michigan, while the tax is seventeen times as great. Michigan has one return in this occupation for each 9,500 in population; New Jersey, one for each 16,000; and for the United States the ratio is one in 35,000.

The annual report of the Secretary of the Treasury on *The State of the Finances* for 1918 (Washington, pp. 540) prints among the exhibits many documents of historic interest relating to the issue of bonds, treasury certificates of indebtedness, war saving certificates, and war risk insurance.

The federal Treasury Department has recently prepared a new compilation of customs laws and digests of decisions.

The Superintendent of Public Documents has prepared new price lists on *Tariff and Taxation* (July, 1918, pp. 25) and *Finance* (pp. 15).

Senate Report No. 617, 65th Congress, 3d Session, prints *Revenue Bill of 1918*, being the report of the Committee on Finance (Washington, Dec. 6, 1918, pp. 60).

The United States Tariff Commission has continued its reports in the Tariff Information Series with No. 8, *The Brush Industry* (pp. 77). This commission has also made a report to Congress on *Dyes and Other Coal-Tar Chemicals* recommending amendments to the act of September, 1916 (pp. 82).

The Legislative Reference Division of the Library of Congress has printed for the use of the House Committee on Ways and Means a

pamphlet on *War Taxation of Incomes, Excess Profits, and Luxuries in Certain Foreign Countries.* It contains, for example, a synopsis of the income tax acts of Great Britain, Canada, and France, and similar summaries for the excess profits tax laws of various countries (pp. 128).

A bulletin on *State Finances* published by the State Comptroller of New York for January, 1919, has an article entitled "Mortgage tax law no real revenue measure," by Comptroller Eugene M. Travis.

A Bulletin of the State Tax Department of New York, July, 1918, prints *The Tax Law of 1918 with Amendments* (Albany, pp. 792).

The *Ninth Biennial Report of the Wisconsin Tax Commission* (Madison, 1918) contains a chapter on municipal accounting and finances in which charts illustrate the various sources of revenue and expenditures of cities.

The *Thirty-first Annual Report of the Town Officers of North Attleborough, Massachusetts,* includes a report of a subcommittee which was appointed to investigate the merits of the Somers system of real estate valuation (pp. 16-40). Many letters are quoted from officers of other cities that have had experience with this system.

T. A. Polleys, tax commissioner for the Chicago Northwestern Railroad, has prepared some sheets showing the general property taxes per acre in various districts of Wisconsin (Chicago).

The Bureau of Municipal Research of Toronto has again analyzed the finances of that city in a pamphlet entitled *City Budget Facts, 1918.*

PERIODICALS

The REVIEW is indebted to Robert F. Foerster for abstracts of articles in Italian periodicals, and to R. S. Saby for abstracts of articles in Danish and Swedish periodicals.

Economic History, United States

(Abstracts by E. L. Bogart)

BARNARD, H. *The South Atlantic States in 1833, as seen by a New Englander.* Maryland Hist. Mag., Sept., Dec., 1918. Pp. 28, 92. Impressions taken from a diary of the author. Depicts the customs of the locality and period. Complete in two numbers.

BASSETT, J. S. *How the Southerners supported the War for Secession.* Hist. Out., Oct., 1918. Pp. 3. The financial expedients forced upon the Confederacy for the support of their cause.

BRADLEE, F. B. C. *The Boston and Lowell railroad, the Nashua and Lowell railroad and the Salem and Lowell Railroad.* Essex Inst. Hist. Col., July, Oct., 1918. Pp. 32, 32. A full account of early railroad development. Illustrations and facsimiles. Complete in two numbers.

ELDRED, W. *The wheat and flour trade under Food Administration control: 1917-18.* Quart. Journ. Econ., Nov., 1918. Pp. 70. Shows how the Food Administrator endeavored to enforce price stability, conservation, and equality of distribution.

FAIRCHILD, F. R. *The public finance of Santo Domingo.* Pol. Sci. Quart., Dec., 1918. Pp. 21. General survey of economic and financial conditions.

FOX, D. R. *The economic status of the New York Whigs.* Pol. Sci. Quart., Dec., 1918. Pp. 18. Showing how property and wealth have an effect upon the make up of political parties.

KELLOG, L. P. *The Hudson Bay Company tokens.* Wis. Mag. of Hist., Dec., 1918. Pp. 8. The use of brass tokens signifying the value or fractional value of a beaver skin, the standard used in trading.

LANDIS, C. I. *History of the Philadelphia and Lancaster turnpike; the first long turnpike in the United States.* Penn. Mag. of Hist. & Biog., Apr., July, 1918. Pp. 14, 24. History of the first important public improvement of the state. The turnpike ran from Philadelphia to Lancaster. First two instalments.

MARYE, W. B. *Early settlers of the site of Havre de Grace.* Md. Hist. Mag., Sept., 1918. Pp. 18. Treats of the settlement of the locality, trade with the Indians, etc.

OSGOOD, E. W. *The development of transportation in connection with problems of Western expansion.* Hist. Out., Dec., 1918. Pp. 3. A study, and hints on class presentation, of the aid given western development by the growth of railway transportation.

POE, E. E. *The peace treaties of the United States.* Daught. of Am. Rev. Mag., Jan., 1919. Pp. 8. A survey of the various peace treaties with their principal points. First instalment.

ROGERS, H. W. *The lottery in American history.* Americana, Jan., 1919. Pp. 15. A comprehensive study of legalized lottery with its growth and final decline.

SHIPPEE, L. B. *The first railroad between the Mississippi and Lake Superior.* Miss. Valley Hist. Rev., Sept., 1918. Pp. 22. Though under consideration for some years, the railroad was not completed until 1871. It marked an era in Minnesota commerce.

STEVENS, W. E. *Fur trading companies in the Northwest, 1760-1816.* Miss. Valley Hist. Rev., Oct., 1918. Pp. 9. The growth and centralization of the trade described.

STEWART, E. D. *The Populist party in Indiana.* Ind. Mag. of Hist., Dec., 1918. Pp. 36. The Populist party as an outgrowth of economic conditions. First instalment.

Economic mobilization of the United States for the War of 1917. Hist. Out., Jan., 1919. Pp. 14. An historical survey of the preparation for war along economic lines.

List of the original Lancaster subscribers to the capital stock of the Philadelphia and Lancaster turnpike. Lancaster County Hist. Soc., June, 1918. Pp. 8.

Economic History, Foreign

ATTOLOCIO, B. and GIANNINI, F. *The industrial position of Italy.* Journ. Royal Stat. Soc., May, 1918. Pp. 49.

COURANT, M. *Le Japon: son développement politique et économique depuis cinquante ans.* L'Econ. Franç., Oct. 5, 1918. Pp. 1½.

DESCHAMPS, A. *Les moyens de la politique de conquête commerciale des marchés étrangers au XVII et au XVIII siècles.* Rev. d'Econ. Pol., July-Aug., 1918. Pp. 9.

FRANK, T. *The economic life of an ancient city.* Classical Philology, July, 1918. Pp. 16.

GUYOT, Y. *L'industrie de la laine et les autres industries textiles.* Journ. des Econ., Oct., 1918.

JAURÉGY, FROMENT, and STEPHEN. *L'industrie allemande et l'après-guerre.* Bull. Soc. d'Encouragement pour l'Industrie Nationale, May, June, 1918.

L.-G. *La Nouvelle-Zélande.* Journ. des Econ., Oct., 1918.

DE LAUNAY, L. *La valeur economique de l'Alsace-Lorraine.* La Nature, May 4, 1918. Pp. 8.

NEWBIGIN, M. I. *Some aspects of the industrial revolution in western Europe.* Scottish Geog. Mag., July, 1918. Pp. 12.

OUALID, W. *Les problèmes économiques de la nouvelle Europe centrale.* L'Europe Nouvelle, Nov. 16, 1918. Pp. 4.

PAWLOWSKI, A. *L'industrie chimique française et la guerre.* Journ. des Econ., Oct., 1918. Pp. 11.

RAFFALOVICH, A. *Quelques aspects de la situation en Allemagne.* L'Econ. Franç., Nov. 9, 1918. Pp. 2.

SLATER, G. *South Indian economics.* Indian Journ. Econ., July, 1918. Pp. 13.

YAMASAKI, K. *Recent economic developments in Japan in their relation to her trade with the United Kingdom.* Journ. Royal Stat. Soc., July, 1918. Pp. 10.

Aspects de la situation économique en Allemagne. L'Econ. Franç., Sept. 28, 1918. Pp. 2.

Commerce and finance in the federated Malay states. Scottish Bankers Mag., Oct., 1918.

Industrial development of India. Wealth of India, Aug., 1918.

Agricultural Economics

(Abstracts by A. J. Dadisman)

APP, F. *Farm profits and factors influencing farm profits on 284 general farms and 75 dairy farms in Monmouth County, N. J.* N. J. Sta. Bull. No. 312, Jan., 1917. Pp. 89. A detailed study, with 85 tables, 8 plates, and 6 figures.

CADY, V. M. *A western experiment in land settlement.* Survey, Sept. 21, 1918. Pp. 4. An argument in favor of the California plan of land settlement.

CLOTHIER, R. W. *Farm organization in the irrigated valleys of southern Arizona.* U. S. Dept. Agr. Bull. 654, 1918. Pp. 58. A popular bulletin describing the agriculture in three widely separated areas in Arizona. Data shown in the tables were obtained from 627 survey records. Illustrated.

COULTER, J. L. *Coöperation among farmers.* Mo. Bull. Mo. State Bd. of Agr., No. 10, Oct., 1918. Pp. 15. A popular discussion of principles of coöperation and their application.

DUFOURMANTELLE, M. *Société d'Economie Sociale; reunion annuelle de 1917. La main-d'oeuvre agricole; comment y suppléer.* Réf. Soc., Sept. 16, 1917. Pp. 36. A discussion of the farm labor situation in France with suggestive solutions for some of the problems. Short discussions by others.

DUNCAN, C. S. *Mercantile and agricultural economics.* Journ. Pol. Econ., Oct., 1918. Pp. 38. A very careful analysis of the essential differences between the farm as a business and other kinds of business, with special emphasis on accounting.

GOLDENWEISER, E. A. and BALL, J. S. *Pasture land on farms in the United States.* U. S. Dept. Agr. Bull. 626, May, 1918. Pp. 94. A bulletin made up principally of tables and graphs showing total land, land in crops, land in pasture, and other farm land in the United States by states and counties. The data used were collected by the Bureau of Census in 1910.

HANRA, G. *L'énergie électrique au village et son application à l'agriculture.* Le Musée Soc., July 1, 1918. Pp. 23. The production, distribution and sale of electricity in rural communities and suggestions for its utilization.

HASKELL, E. S. *A farm-management survey in Brooks County, Ga.* U. S. Dept. Agr. Bull., No. 648, 1918. Pp. 64. A study of farm practice and cost of producing cotton in southwestern Georgia. Tables are based on survey records from 534 farms.

HAWTHORNE, H. W. *A five-year farm management survey in Palmer township, Washington County, Ohio, 1912-1916.* U. S. Dept. Agr. Bull. No. 716. Sept., 1918. Pp. 53. Technical bulletin. A five-year study of 25 farms from survey records, with tables, figures and illustrations.

KEATINGE, C. F. *Size of land holdings in the Bombay Presidency.* Indian Journ. Econ., July, 1918. Pp. 51. A history of the land holding system in Bombay Presidency and necessary evils arising therefrom. Appendices showing typical subdivisions of holdings, extent of similar systems in other countries with causes and remedial measures.

DE MARCILLAC, A. *A propos de la main-d'oeuvre.* Réf. Soc., Sept. 16, 1917. Pp. 13. A discussion of the present farm labor situation and after-war problems in France, emphasizing the needs for better rural life.

MAYLANDER, A. *Food situation in central Europe, 1917.* Bull. U. S. Bureau Lab. Stat. No. 242, Apr., 1918. Pp. 128. A summary of the food situation in 1917, outline of the food policy, tables with prices and weekly rations with comments and criticisms from daily papers.

MEAD, E. *Summary of soldiers settlements in English-speaking countries.* U. S. Dept. Interior. 1918. Pp. 28. A summary of legislation, administration and progress of settlements for soldiers in the English-speaking countries.

POIRIER, P. *Le Riz Italian.* Journ. des Econ., Oct., 1917. Pp. 7. Production and importance of rice in Italy with tables showing production, prices, exports and imports.

SMITH, A. G. *A farm-management study in Anderson County, S. C.* U. S. Dept. Agr. Bull. 651, 1918. Pp. 32. A study of farm practice and cost of producing crops; data for tables and charts were taken from survey records of 112 farms.

Farm allotments and farm laborers' allotments in the Durham state land settlement. Bull. Cal. Land Settlement Board, 1918. Pp. 7. A brief statement of the progress and conditions of settlement, with diagram.

Railways and Transportation

(Abstracts by Julius H. Parmelee)

ACWORTH, W. M. *The federal railroad administration of the United States.* Ry. Gaz.(London), Dec. 13, 1918. Pp. 10. Observations of a foreign student of American railway affairs.

BARNUM, R. L. *Hines, railroad head.* N. Y. Eve. Post, Jan. 18, 1919. Pp. 2. Sketch of Director-General of Railroads, Walker D. Hines.

BARNY, W. J. *The modern terminal port.* Freight Handling & Term. Engg., July, Aug., 1918. Pp. 2, 4.

BESSE, P. *Le statut financier du réseau navigable.* L'Europe Nouvelle, Oct. 5, 1918. Pp. 4.

CARTER, W. S. *Effect of federal control on railway labor.* Ry. Age, Dec. 13, 1918. Pp. 3. Situation outlined by director of Railroad Administration's Division of Labor.

CLAGETT, B. *Organization of American railroads under government control.* Quart. Journ. Econ., Nov., 1918. Pp. 8.

COLE, A. B. *Electric freight haulage is an economic duty.* Elec. Ry. Journ., Jan. 4, 1919. Pp. 10.

COLE, A. B. *Electric railways to relieve congestion.* Freight Handling & Term. Engg., Aug., 1918. Pp. 2.

COOPER, C. S. *Peru and its principal railways.* Ry. Rev., Jan. 4, 11, 18, 1919. Pp. 5, 5, 5. Illustrated.

CUNNINGHAM, W. J. *The standardizing of operating statistics.* Ry. Age, Jan. 3, 1919. Pp. 6. Work of the operating statistics section, U. S. R. R. Administration.

DANIELS, W. M. *Interstate Commission and federal control.* Ry. Rev., Nov. 16, 1918. Pp. 3. Address by chairman of Interstate Commerce Commission before National Association of Railway and Utilities Commissioners.

DEWING, A. S. *The theory of railroad reorganization.* Am. Econ. Rev., Dec., 1918. Pp. 22. Summary of principles and aims underlying reorganization.

DEWING, A. S. *The procedure of contemporary railroad reorganization.* Am. Econ. Rev., Mar., 1919. Pp. 33.

DUNN, S. O. *American railway forces in the great war.* Ry. Age, Jan. 3, 1919. Pp. 17. Work of the transportation department, A. E. F.

DUNN, S. O. *Great Britain faces serious railway situation.* Ry. Age, Dec. 27, 1918. Pp. 4. Physical problems, standardization of equipment.

DUNN, S. O. *Opportunities for railway supply exports.* Ry. Age, Jan. 3, 1919. Pp. 4.

GADSDEN, P. H. *Cohesive spirit of electric railway industry must be conserved and intensified.* Elec. Ry. Journ., Jan. 4, 1919. Pp. 3.

GARRETT, G. P. *War's aftermath for the railroads.* No. Am. Rev., Dec., 1918. Pp. 7.

GOLDMARK, P. *Women in the service of the railways.* Ry. Age, Dec. 6, 1918. Pp. 3. Growth in numbers employed and in field of service.

HARRINGTON, J. W. *Electrify? How? When? Why?* Railroad Men's Mag., Nov. 2, 1918. Pp. 8.

HUNGERFORD, E. *Uncle Sam, railroader.* Sat. Eve. Post, Dec. 28, 1918. Pp. 5.

JOHNSON, A. B. *Shall American railways be Prussianized?* Ry. Age, Jan. 10, 1919. Pp. 3.

KAHN, O. K. *Government ownership and war taxation.* Ry. Age, Nov. 15,

1918, 2d Sec. Pp. 5. Opposes primitive paternalism in either the railway or the tax field.

LEE, B. *Constitutional objections to the railway control act.* Yale Law Journ., Dec., 1918. Pp. 8.

McADOO, W. G. *The work of the division of operation.* Ry. Age, Jan. 10, 1919. Pp. 12. Summary of part of Director-General's annual report for 1918.

MACCARTHY, C. P. *German plans for railway development in Africa.* Geog. Journ. (London), Nov., 1918. Pp. 8. Review of various German publications on the subject.

McVEY, J. N. *Difficulties in handling French equipment.* Ry. Rev., Oct. 19, 1918. Pp. 4.

MARCOSSON, I. F. *Army tracks and traffic in France.* Sat. Eve. Post, Dec. 7, 1918. Pp. 8. Illustrated. The work of our railway engineers and operators in France.

NASH, L. R. *Recent developments in service-at-cost franchises for utilities.* Elec. Ry. Journ., Jan. 4, 1919. Pp. 19.

PARMELEE, J. H. *Railway revenues and expenses in 1918.* Ry. Age, Jan. 3, 1919. Pp. 4. Record revenues of nearly five billions and expenses of four billions; net income nearly quarter billion less than government guarantee.

PAYNE, J. L. *The confused railway situation in Canada.* Ry. Age, Jan. 3, 1919. Pp. 3.

PRICE, T. H. *"The railroad bureau for brickbats and bouquets."* Ry. Age, Oct. 25, 1918. Pp. 4. Work of the Bureau for Suggestions and Complaints, U. S. R. R. Administration.

PROUTY, C. A. *Progress report on the valuation work.* Ry. Age, Jan. 3, 1919. P. 1. Field work to be completed in 1919; entire work by January 1, 1922.

RAYMOND, W. G. *The valuation aspect of abandoned property.* Ry. Age, Nov. 29, 1918. Pp. 3. An accounting problem of importance to the railways.

REDFIELD, W. C. *Rail, water and road.* Nation's Business, Nov., 1918. Pp. 2. The interlocking service of the three methods of transportation.

ROULAND, E. *Un projet de réquisition des chemins de fer.* L'Econ. Franç., Oct. 19, 1918. Pp. 2. Criticizes the proposal to place the French railways as a war measure under the direction of the Minister of Public Works.

RUGGLES, C. O. *Railway service and regulation.* Quart. Journ. Econ., Nov., 1918. Pp. 51. Deals largely with problem of adequate supply and efficient utilization of railway equipment.

SCHMIDT, E. C. *Work of the full conservation section.* Ry. Rev., Nov. 30, 1918. Pp. 4. Branch of U. S. R. R. Administration whose work reduced a saving in 1918 of at least 10,000,000 tons of fuel on the railways.

SHONTS, T. P. *A memorandum on to-day's railroad problem in the United States.* Econ. Wld., Dec. 14, 1918. Pp. 2.

SISSON, F. H. *A financial analysis of the railways in federal control.* Annalist, Dec. 9, 1918. P. 1.

STEDMAN, E. A. *The American Railway Express Company.* Ry. Rev., Oct. 12, 1918. Pp. 3.

STEMBRIDGE, E. C. *Railways in British Guiana.* Ry. Gaz. (London), Oct. 11, 1918. Pp. 3.

SWAZEY, E. S. *Mexico as a potential market for railway supplies.* Ry. Age, Nov. 15, 1918. Pp. 3.

TAYLOR, A. M. *Electric railways help win the war.* Elec. Ry. Journ., Jan. 4, 1919. Pp. 2.

WANG, C. C. *Legislative regulation of railway finance in England.* Univ. Ill. Studies Soc. Sci., March-June, 1918. Pp. 196. Historical development of supervision over capital issues and accounts.

WILHELM, D. *Is Uncle Sam to keep the railroads?* Independent, Nov. 30, 1918. Pp. 4. Largely a review of the work of the U. S. Railroad Administration.

Annual report Interstate Commerce Commission. Ry. Age, Dec. 6, 1918. Pp. 8. Digest of commission's report to Congress for 1918.

Argentine railways in 1917-18. No. 1. Ry. Gaz. (London), Dec. 13, 1918. Pp. 2. Gross receipts increased, but net declined.

Brazilian railways. Ry. Rev., Oct. 19, Nov. 16, 1918. Pp. 2, 4. Abstract of report of Bureau of Foreign and Domestic Commerce.

A chronological history of government control. Ry. Age, Jan. 3, 1919. Pp. 2.

The coming industrial expansion of the world. Ry. Age, Nov. 22, 1918. Pp. 3. Report issued by Guaranty Trust Company; new railroad construction as a factor.

Government locomotive orders predominate in 1918. Ry. Age, Jan. 3, 1919. Pp. 4. Locomotive production greatest since 1907.

The gravity of the railroad situation. Com. & Finan. Chron., Jan. 4, 1919. Pp. 3. Increased labor and other costs leading to financial difficulties.

I. C. C. opposes government railroad operation. Ry. Age, Jan. 10, 1919. Pp. 4. Statement submitted by Interstate Commerce Commission to Senate committee on interstate commerce.

McAdoo proposes extension of federal control. Ry. Age, Dec. 13, 1918. Pp. 2.

"Nationalization" of British railways. Ry. Gaz. (London), Dec. 13, 1918. Pp. 4. Legislation governing terms of purchase, and possible cost.

Nearly quarter million men in service. Ry. Age, Jan. 3, 1919. Pp. 2. Contribution of American railways to military service in the war: 220,000 men, or 12 per cent of the total force employed.

Only a small addition to main track mileage. Ry. Age, Jan. 3, 1919. Pp. 10.

Detail of railway construction during 1918; 721 new miles of lines, less than any year since Civil War.

Opinion of railway supply industry sought. Ry. Age, Dec. 27, 1918. Pp. 2. Questionnaire on the railway problem submitted to the membership of Railway Business Association.

President proposes to relinquish railroads. Ry. Age, Dec. 6, 1918. Pp. 2. Discussion of section of President's annual message to Congress dealing with the railway problem.

Railroad commissioners annual convention. Ry. Rev., Nov. 23, 1918. Pp. 7. Digest of proceedings of National Association of Railroad and Utility Commissioners.

Railroad policy discussed by Walker D. Hines. Ry. Age, Dec. 20, 1918. Pp. 6. Assistant Director-General of Railroads advocates five-year extension of government control.

Railway executives' plan for regulation of railways. Ry. Rev., Jan. 11, 1919. Pp. 3. Railway reconstruction program submitted to Senate committee on interstate commerce.

The railways of Syria. Ry. Gaz. (London), Dec. 20, 27, 1918. Pp. 2, 1.

Receivership and foreclosure sales in 1918. Ry. Age, Jan. 3, 1919. Pp. 2. Over 20,000 miles of railway in receivers' hands on December 31, 1918.

A review of railway signaling for the past year. Ry. Age, Jan. 3, 1919. Pp. 7. New signals nearly all of automatic type. Signals installed on 2000 miles in 1918.

State ownership and operation of railways. Ry. Gaz. (London), Jan. 3, 10, 1919. Pp. 4, 4. Digest of evidence before South African commission of inquiry into policy of state ownership.

A year of prosperity for railway labor. Ry. Age, Jan. 3, 1919. Pp. 6. Labor supply, immigration, wages, etc., reviewed.

Commerce

(Abstracts by H. R. Tosdal)

Abney, J. P. *Speculating vs. gambling in the commodity and security markets.* Econ. Wld., Oct. 26, 1918. Pp. 2. Examines transactions, especially in cotton futures, with special reference to a distinction between gambling and speculation. Adds nothing to previous discussions.

Anderson, B. M., Jr. *Why price-fixing is not justifiable as a peace-time policy.* Trust Companies, Nov., 1918. Pp. 5. Upholds price-fixing as a concomitant of war-time conditions, but takes the position that such exercise of government control cannot be justified as a permanent or peace time policy. The influences which determine prices are so far reaching that complete regulation would be unsuccessful in peace time.

Bawlf, W. R. *Marketing Canada's grain crop under government control.* Econ. Wld., Oct. 12, 1918. Pp. 2. Description of government control of

marketing of wheat and comparison with methods followed in the United States.

Bradford, E. A. *Relation to producer and retailer of fixed-price problem.* Annalist, Dec. 2, 1918. P. 1. Discusses Federal Trade Commission's account of its work and its differences from the courts in the application of the law. Holds that competition in production serves the public better than war between resellers.

Devinck, R. *Cherbourg, grand port commercial.* L'Europe Nouvelle, Sept. 21, 1918. Pp. 2. Short historical and geographical description of Cherbourg.

Dureau, G. *La question des sucres en 1918.* Journ. des. Econ., Nov., 1918. Pp. 14. After brief historical survey of Brussels Sugar Convention and its denunciation by France and England, examines prospective sugar policy in both countries.

Eldred, W. *The wheat and flour trade under Food Administration control, 1917-1918.* Quart. Journ. Econ., Nov., 1918. Pp. 70. An excellent critical examination of government control. Though in the enforcement of conservation the government was not so successful, the stabilization of prices and equable distribution of available wheat were achievements of first importance.

Gerstenberg, C. W. *Sees business depression a step to ultimate prosperity.* Annalist, Dec. 2, 1918. P. 1. Expects to see prices fall and business decline unless the government intervenes to maintain a demand for industrial products or the Versailles Conference decrees a temporary, continued circulation of world-wide inflated currency, both of which are unlikely.

Haney, L. H. *Price fixing in a competitive industry: a pioneer case.* Am. Econ. Rev., Mar., 1919. Pp. 10.

Kershaw, J. P. C. *"Key" industries and their "after the war" development in the United Kingdom.* Finan. Rev. Rev., Dec., 1918. Pp. 17. Urges building up British control of key industries (*i. e.,* basic industries supplying materials and fundamental industrial equipment) by securing control of raw materials, cheap and plentiful supplies of skilled labor, and good organization. Favors protective tariffs if necessary.

Lecarpentier, G. *Le commerce Franco-Balkanique et son avenir.* L'Econ. Franç., Nov. 30, 1918. Pp. 3. The second of two statistical surveys of France's commerce with the Balkans, taking up Greece, Bulgaria, and Serbia.

Maitre, J. *L'exportation francaise et son avenir.* Ref. Soc., Nov. 16, 1918. Pp. 13. Brief but searching inquiry into conditions and requirements for development of French exportation.

Morse, L. K. *The price-fixing of copper.* Quart. Journ. Econ., Nov., 1918. Pp. 35. An interesting account of conditions in copper industry leading to government regulation. Asserts that there has been no profiteering.

PAYEN, E. *Le pétrole, sa production dans le monde.* L'Econ. Franc., Oct. 26, 1918. Pp. 2. Brief sketch of international petroleum production with some reference to price developments.

PAYEN, E. *La production houillère française avant, pendant et après la guerre.* L'Econ. Franç., Nov. 16, 1918. Pp. 2. Shows by statistics the decline in domestic production and imports during the war and present prospects.

ROVENSKY, J. E. *America the creditor nation.* Bankers' Mag., Oct., 1918. Pp. 5. Sketches transition of the United States from debtor to creditor nation and the accompanying increase in financial power and opportunity.

SCHMIDT, L. W. *Testing the buying power of a foreign market.* Am. Mach., Sept. 26, 1918. Suggestions for estimating probable markets in foreign countries.

SMITH, G. E. *The realities to be faced in connection with our foreign trade after the war.* Econ. Wld., Nov. 9, 1918. Pp. 2. Emphasizes need of definite foreign trade policy and urges co-operation in the development of the export trade.

STAMP, J. C. *The effect of trade fluctuations upon profits.* Journ. Royal Stat. Soc., July, 1918. Pp. 45. Excellent paper read before the Royal Statistical Society. After discriminating use of various refinements of statistical method, concludes that effect of trade fluctuations upon profits is much less than commonly supposed.

SWAZEY, E. S. *Foreign demand and reduced supply back of high meat prices.* Annalist, Dec. 23, 1918. Pp. 2. An independent investigation seems to support the contention of the packers in their controversy with the Federal Trade Commission. Per thousand of population, meat cattle have dropped from 840 in 1900 to 640 in 1918; yet, even with immense European demand, net earnings are said to have risen only 0.63 per cent.

SWAZEY, E. S. *Prospective after-war demand assures United States cotton future.* Annalist, Oct. 28, 1918. Pp. 2. Replacement demands should augment the normal increase and assure continued prosperity to cotton producers.

An analysis of China's foreign commerce during the past decade. Econ. Wld., Nov. 2, 1918. Pp. 2. Statistics of imports and exports. Asserts that China offers one of most tempting fields for American manufactures.

China's great natural resources at America's command. Annalist, Jan. 6, 1919. Pp. 2. Asserts that American capital would be welcomed in the development of great natural resources, some of which are described.

Food control in the United States. Mo. Lab. Rev., Sept., 1918. Pp. 8. Brief and incomplete sketch of later developments in food control.

Iron in the Americas. Bull. Pan Am. Union, Aug., 1918. Pp. 15. Popular article upon iron industry with special reference to the development in Latin-American countries.

Needs of South American markets. World's Markets, Sept., 1918. Pp. 3. Extracts from an extensive survey of South American markets written by Mr. Percy F. Martin for the *London Times.*

Ore advanced 25 cents and pig iron $1. Iron Age, Sept. 26, 1918. An account of action by price-fixing conference at Washington.

Woolen industry hopefully faces after-war conditions. Annalist, Nov. 4, 1918. Optimistic survey of woolen industry, based upon assumption that foreign and domestic civilian demand and necessity for replenishing supplies will bring continued prosperity.

The work of the War Trade Board. World's Markets, Aug., 1918. Pp. 5. Interesting account taken from various sources of the organization and activities of the War Trade Board.

Accounting

(Abstracts by Martin J. Shugrue)

Chase, H. S. *Governmental sinking funds, serial bonds and depreciation reserves.* Journ. Account., Oct., 1918. Pp. 5. An address before the Dominion Association of Chartered Accountants, Montreal, September, 1918. Advantages of serial bonds over sinking fund bonds. Necessity for depreciation reserves in all public service accounting.

Cooke, M. L. *True cost finding. What it can do for the railroads.* Indus. Management, Jan., 1919. Pp. 3. Main purpose in collecting cost data is not to save money but to measure efficiency. What cost finding will do and how it may be brought about.

Davis, F. W. *Outline of a cost accounting system for a wooden ship yard.* Journ. Account., Jan., 1919. Pp. 14. While primarily intended for use in wood ship yards, can also be used with modifications in steel ship yards. Is in accordance with views of the Emergency Fleet and United States government accountants as the writer interprets them and he does not claim to be its originator.

Fernald, H. B. *Capital accounts of a municipality.* Journ. Account., Oct., 1918. Pp. 9. Some problems connected with the proper treatment of the capital accounts of a municipality particularly from the standpoint of the citizen and taxpayer.

Harrison, G. C. *Cost accounting to aid production.* I, II, III, IV. Indus. Management, Oct., Nov., Dec., 1918, Jan., 1919. Pp. 5, 8, 8, 7. (1) How the well recognized principles of industrial management may be applied to a system of cost accounting to render it more useful by assisting production. Illustrated with diagrams. (2) Points out the necessity of establishing a system of standard costs before planning and dispatching methods are installed. Illustrated with diagrams. (3) States emphatically the need of a business for a well and carefully planned cost accounting system. Illustrates by diagram the basic features of a simple cost system for a business manufacturing various kinds of machines of a standard character. (4) Where considerable refinements are necessary, accurate costs can best be obtained by using machine rates. A method of obtaining these machine rates is illustrated in detail bringing in the use of punched cards and sorting and tabulating machines.

Holloway, C. B. *Carrying on with the accountants in the American Expedi-*

tionary Forces. Journ. Account., Dec., 1918. Pp. 5. Brief description of the magnitude and scope of the accounting and finance operations.

HOLMES, E. J. *Accounting systems in army camps.* Journ. Account., Dec., 1918. Pp. 6. Explains in a general way the accounting system in army camps in connection with the disbursement of regular funds for authorized expenditures. Payrolls of enlisted men and officers' pay form largest part of work.

MAPES, L. D. *Accounting of Commission for Relief in Belgium.* Journ. Account., Jan., 1919. Pp. 5. An interesting description of the accounting work of the commission, which had relations with over 100 principal committees and which in turn covered a field of over 2,000 subcommittees.

PHILBRICK, A. L. *Verification of inventories.* Journ. Account., Dec., 1918. Pp. 12. An interesting article explaining the position and moral and legal responsibility of the auditor in reference to the verification of inventory figures.

STEVENS, E. O. *Verification of the accounts receivables.* Pace Student, Nov., 1918. Pp. 3. Explains a practical method of testing the value of a concern's accounts receivable.

WEST, W. H. *Accounting for cantonment construction.* Journ. Account., Nov., 1918. Pp. 6. The important part accountants played in the successful construction work of army cantonments.

American Institute of Accountants, November, 1918, examinations. Journ. Account., Dec., 1918. Pp. 11. Contains questions on three general subjects: auditing, commercial law, and accounting theory and practice.

Labor and Labor Organizations

(Abstracts by George E. Barnett)

BROWN, J. W. *Judicial regulation of rates of wage for women.* Yale Law Journ., Jan., 1919. Pp. 19. Discusses the principles which should determine the minimum wage for women in an occupation in which both women and men are employed.

COLE, G. D. H. *British labor and reconstruction.* Dial, Nov. 30, 1918. Pp. 4. British labor has no reconstruction policy.

FAWCETT, MRS. *Equal pay for equal value.* Contemp. Rev., Oct., 1918. Pp. 5. Repudiates the "standard of living" as a basis for fixing the wages of women.

FITCH, J. A. *The guild reappears in industry.* Survey, Nov. 16, 1918. Pp. 2. The New York local photo-engravers' union fixes a minimum selling price for plates, to which employers must conform.

HOBBS, M. A. *War time employment of women.* Am. Lab. Legis. Rev., Dec., 1918. Pp. 6. Summary of the more important facts.

MCLARTY, D. L. *Payment by results.* Engg. Mag., Sept. 13, 1918. Explains the premium bonus system with examples worked on the Rowan system.

LEROY, M. *Les nouvelles tendances syndicales.* L'Europe Nouvelle, Sept., 28, 1918. Pp. 4. The idea that the present social order is to be destroyed is losing ground.

Moses, M. *Compulsory arbitration in Great Britain during the war.* Journ. Pol. Econ., Nov., 1918. Pp. 19. From a historical and statistical survey of labor disturbances during the war, reaches the conclusion that the efficiency of anti-strike legislation is doubtful.

Picard, R. *Les congres ouvriers francais en juillet 1918.* Rev. d'Econ. Pol., July-Aug., 1918. Pp. 16. Summarizes the debates and resolutions of the 1918 session of the G. C. T.

Prentiss, F. L. *Putting women into the machine shop.* Iron Age, Oct. 10, 1918. Successful in Cleveland plants; qualities in which women excel.

Sanger, S. *Labour questions in the peace settlement.* Contemp. Rev., Oct., 1918. Pp. 9. Argues that a permanent commission is a prime requisite for securing international labor treaties.

Scharrenberg, P. *Sanitary conditions in labor camps.* Am. Fed., Oct., 1918. Pp. 3. The results produced by the California law of 1913 briefly set forth.

Squires, B. M. *New York harbor wage adjustment.* Mo. Labor Rev., Sept., 1918. Pp. 27.

Stone, N. I. *Buying unemployment insurance cheap.* Survey, Dec. 28, 1918. Pp. 2. Urges the immediate cancellation of war contracts coupled with provision of unemployment benefits for the workers thus made idle.

Wolf, D. *A tested profit-sharing plan.* Indus. Management, Dec., 1918. Pp. 3. Description of the plan of the Miller Lock Company.

Awards and findings of the National War Labor Board. Mo. Lab. Rev., Sept., 1918. Pp. 11.

Cost of industrial boards: review, 1917-18. N. S. Wales Indust. Gaz., Sept., 1918. Pp. 16.

Demobilisation and resettlement. Lab. Gaz. (London), Nov., 1918. Pp. 3. Description in broad outline of the English plan.

Health hazards in the cloth sponging industry. Special Bull. N. Y. Dept. Lab., No. 89, Nov., 1918. Pp. 24.

Interim report of Royal Commission appointed to investigate the dispute existing on the British Columbia coast between various ship owners and their employees. Lab. Gaz., Oct., 1918. Pp. 7. The employers concerned were masters and mates, members of the Canadian Merchant Service Guild.

Labour in the treaty of peace. New Statesman, Oct. 12, 1918. Pp. 2. Urges the inclusion in the treaty of the provisions formulated by the English labor party.

Minimum wage legislation in U. S. Am. Lab. Legis. Rev., Dec., 1918. Pp. 10. Digest of the laws.

The problem of demobilization. Journ. Pol. Econ., Dec., 1918. Pp. 19. An analysis of the problem into its elements.

Rates of wages paid to workers placed by public employment offices in the United States, July, 1918. Mo. Lab. Rev., Sept., 1918. Pp. 25.

Regulations of women's working hours in the U. S. Am. Lab. Legis. Rev., Dec., 1918. Pp. 16. General view of the existing legislation.

Report of Royal Commission appointed to inquire into the alleged unrest existing in the shipbuilding industry in the province of Quebec. Lab. Gaz. (Canada), Nov., 1918. Pp. 18. The commission acted in a mediatory capacity in several disputes, the details of which are set forth in the report.

Review of labor legislation of 1918. Am. Lab. Legis. Rev., Sept., 1918. Pp. 40.

Union scales in the building, metal and granite and stone trades and in freight handling. Mo. Lab. Rev., Sept., 1918. Pp. 18.

Money, Prices, Credit, and Banking

(Abstracts by Chester A. Phillips)

Anderson, B. M., Jr. *The benefits of price readjustment.* Econ. Wld., Dec. 28, 1918. Pp. 3. Artificial control of business and prices should be dispensed with as early as possible. Unemployment should be held in check by government expenditure on useful works.

Anderson, B. M., Jr. *When war ends and prices drop.* Econ. Wld., Nov. 23, 1918. Pp. 5. A cautious forecast.

Barré, M. *La circulation fiduciaire, la thésaurisation et la hausse des prix.* Rev. d' Econ. Pol., July-Aug., 1918. Pp. 14. Traces the growth in note issue of the Bank of France and holds the state, a heavy borrower, responsible for the rise in prices since 1914.

Benham, R. *The raising of fresh banking capital.* Bankers' Mag. (London), Oct., 1918. Pp. 6. The ratio of capital to deposits in English banking has become dangerously low.

Cooper, H. E. *The gold situation and the standard of value.* Trust Companies, Oct., 1918. Pp. 3. Advocates a bounty on gold production.

Emery, H. C. *Impression of German and Russian banks.* Guaranty News, Dec., 1918. Pp. 7. Illuminating observations on banking and economic conditions in Russia and Germany in the later war period.

Frame, A. J. *High living cost laid to war's effect on labor and supply.* Annalist, Nov., 1918. Pp. 2.

Hulbert, E. D. *Trust companies and federal reserve system.* Trust Companies, Oct., 1918. Pp. 3. Criticism of the rediscount policy of the federal reserve system.

Johnston, T. B. *The financing of industry after the war: the acceptance system.* Scottish Bankers Mag., Oct., 1918. Pp. 7. The adoption of "the French system of sending acceptances with invoices" would provide additional working capital for Scotch industry and trade.

Larmer, E. M. *The cattle-loan company.* Journ. Pol. Econ., Oct., 1918. Pp. 24. The main topics treated: types and location of cattle-loan companies, types of cattle loans, the credit analysis made by the cattle-loan company, the marketing of cattle paper, the correlation of cattle-loan companies and allied banks, the economic services of cattle-loan companies.

LEHFELDT, R. A. *Contrôle international de la production de l'or.* Journ. des Econ., Oct., 1918. Pp. 9.

MILLER, A. C. *After-war readjustment in the U. S. rectifying the price situation.* Econ. Wld., Jan. 4, 1919. Pp. 6. Industrial enterprise would be placed on a sound basis and permanently benefited by a quick process of deflation.

MOULTON, H. G. *Commercial banking and capital formation.* IV. Journ. Pol. Econ., Nov., 1918. Pp. 32. Discussion of the theory of capital formation. The extension of credit by commercial banks has effected an increase in the physical volume of trade.

PALGRAVE, R. H. I. *The bank notes circulating in the United Kingdom.* Bankers Mag., (London), Nov., 1918. Pp. 5. Historical account of bank notes in the United Kingdom since 1844. Recommends the restoration of the note issue to the banks of England and Wales.

PULLEYN, J. J. *Amortization of real estate mortgage loans.* Journ. Am. Bankers Assoc., Dec., 1918. Pp. 4. A movement is growing in favor of the amortization of real estate loans made by savings banks.

PUTNAM, G. E. *The federal farm loan system.* Am. Econ. Rev., Mar., 1919. Pp. 23.

RAFFALOVICH, A. *La réforme de la Banque d'Angleterre.* Journ. des Econ., Nov., 1918. Pp. 6. A consideration of the recommendations of the Cunliffe committee.

RICHARDS, H. G. *"Amalgamations."* Finan. Rev. of Rev., Dec., 1918. Pp. 8. The number of English banks has been reduced in twenty years from two hundred to less than thirty. The expansion of industry is the cause and justification of bank amalgamations.

RIST, C. *La Banque d'Emission Austro-Hongroise et les banques de dépôt, etc.* Rev. d'Econ. Pol., July-Aug., 1918. Pp. 8. Historical account, 1913-1917.

ROBERTS, G. E. *Processes of "deflation" and restoring credit to normal levels.* Trust Companies, Dec., 1918. Pp. 3.

SABIN, C. H. *Banking and trust company evolution as affected by the war.* Trust Companies, Oct., 1918. Pp. 6. Tendencies and prospects in state, national, and international banking.

SCUDDER, H. T. *Holds federal reserve system responsible for inflation.* Annalist, Nov. 4, 1918. Pp. 2.

SCUDDER, H. T. *Suggests a government stabilizer to control living cost.* Annalist, Dec. 16, 1918. Recommends the regulation of uncovered paper money as a means of stabilizing prices.

SPRAGUE, O. M. W. *Gold and credit as related to world reconstruction.* Annalist, Jan. 6, 1919. Pp. 2. Urges the adoption of unified and coöperative credit policy by the great central banks of the world.

TAMHAUKER, V. V. *Hoarding of gold in India: fact or fiction?* Wealth of India, Sept., 1918. Pp. 3. India utilizes the precious metals as money and in the arts but does not hoard them.

Treman, R. H., Sands, O. J., and Woodruff, G. *Report of committee on trade acceptances.* Journ. Am. Bankers Assoc., Nov., 1918. Pp. 2. Historical sketch of the trade acceptance in United States and a statement of partially solved problems connected with its introduction.

Venkateswara, S. V. *Mughal currency and coinage.* Indian Journ. Econ., July, 1918. Pp. 12.

Willis, H. P. *War finance inflation directly back of rising cost of living.* Annalist, Nov. 11, 1918. Pp. 2. Our rising prices have been due chiefly to the expansion of long-term bank credit.

Bank amalgamations. Journ. Inst. Bankers, Oct., 1918. Pp. 4. Recent English bank mergers.

Bank of the Netherlands. Bankers Mag. (London), Nov., 1918. Pp. 12. Translation of annual report.

Currency after the war. Bankers Mag. (London), Dec., 1918. Pp. 11. Report of the Cunliffe committee acknowledges the evils of inflation and recommends the retirement of treasury notes and a sharp curtailment of bank loans.

The imperial bank of Germany. Bankers Mag. (London), Oct., 1918. Pp. 16. Report for 1917.

La question de l'or. L'Econ. France, Dec. 7, 1918. Pp. 3. Statistical account of the world's declining gold production and a critical consideration of suggested remedies.

Public Finance

(Abstracts by Charles P. Huse)

Barth, C. G. *The income tax. An engineer's analysis with suggestions.* Journ. Engrs. Club Phila., June-July, 1918. Pp. 21. Develops a mathematical formula for determining rates.

Beebe, H. F. *Federal taxation of income from bonds of states and their subdivisions.* I. B. A. of A. Bull., Oct. 1, 1918. Pp. 3. Believes the proposal both unconstitutional and inexpedient.

Bell, S. *The Cambridge, Massachusetts, system of real estate assessment (with discussion).* Boston Soc. Civil Engrs. Journ., Sept., 1918. Pp. 26.

Bellom, M. *Une erreur dans la taxation du blé.* Journ. des Econ., Oct., Nov., 1918. Pp. 6, 7. A curious result of the method of taxing wheat.

Bruere, H. *The solution of an important fiscal problem undertaken by the Mexican government with American advice.* Econ. Wld., Dec., 1918. Pp. 2. Describes investigations made by American financial experts and gives their recommendations to the Carranza government.

Davenport, H. J. *The stock dividend again.* Bull. Nat. Tax Assoc., Nov., 1918. Pp. 2. This application of the theory of the income tax shows that it "is really indefensible in strict logic."

Davenport, H. J. *The war-tax paradox.* Am. Econ. Rev., Mar., 1919. Pp. 13.

Davenport, H. J. *Would heavier taxes serve better than bond issues?* An-

nalist, Oct. 28, 1918. Pp. 2. Points out clearly the process by which bond issues bring about inflation.

DONAHEY, A. V. *Limit bond issues as well as tax levies.* Ohio Journ. Comm., Apr. 1, 1918. Mr. Donahey, the auditor of state, points out the enormous growth of public debts in Ohio, defends the Smith tax limitation law, and urges the extension of the principle of limitation to the creation of debt. He closes with some pertinent remarks upon economy in public administration.

DOUCET, R. *La taxe sur le luxe.* Le Monde Econ., Oct. 12, 1918. Pp. 3. The French tax of 10 per cent on luxuries has been very productive of revenue.

E. P. *Les discussions de la Société d'Economie politique de Paris: aspect économique des dépenses de guerre.* L'Econ. Franc., Oct. 19, 1918. Pp. 4. A discussion of the economics of war with illustrations from the experience of France and the United States.

FEUGÈRE, E. *La situation financière du département de la Seine.* L'Econ. Franç., Nov. 23, 1918. Pp. 2. Describes the budget of 1918.

FRIDAY, D. *The taxable income of the United States.* Journ. Pol. Econ., Dec., 1918. Pp. 18. An estimate of the national income and of the income subject to the excess profits and income taxes.

G. J. *Les finances de guerre de l'Angleterre. La situation financière et le contrôle financier. Discours de Mr. Bonar Law 18 juin, 19 juin, 1er août 1918.* Rev. Sci. Légis. Finan., July-Sept., 1918. Pp. 52. Deals with the growth of public expenditures and its causes, the relation between the issue of treasury notes and rising prices, the growth of the debt, and the problem of securing economies.

GARDNER, H. B. *Consumption taxes.* Bull. Nat. Tax Assoc., Oct., 1918. Pp. 4. For war purposes, urges their use to a much greater extent in this country.

GARY, J. V. *A brief history of tax reform in Virginia.* Bull. Nat. Tax Assoc., Nov., 1918. Pp. 4. Classification of property and segregation of income have proved very successful.

GEPHART, W. F. *An analysis of the operation of the general property tax in Missouri.* Wash. Univ. Studies, Oct., 1918. Pp. 23. A valuable study, presenting unusual evidence of the injustice of an antiquated system.

HARPER, E. J. *The bases of local taxation in England.* Journ. Royal Stat. Soc., May, 1918. Pp. 52. A critical study, with statistical tables and diagrams, and suggestions for reforms.

HOLCOMB, A. E. *Pending revision of the income and profits taxes.* Bull. Nat. Tax Assoc., Oct., 1918. Pp. 7. Analyzes the bills, pointing out changes.

HOLLANDER, J. H. *Certificates of indebtedness in our war financing.* Journ. Pol. Econ., Nov., 1918. Pp. 8. A brief account of their issue, distribution and employment.

HOLMES, C. E. *The excess profits tax of 1917.* Parts I and II. Bull. Nat. Tax Assoc., Oct., Nov., 1918. Pp. 5, 8. Gives the history of the act and analyzes its provisions.

HUNTER, M. H. *Taxation of public service corporations in the state of New York.* Parts I and II. Bull. Nat. Tax Assoc., Nov., Dec., 1918. Pp. 6, 6. Traces the history of the laws from 1823 on, discussing their application, and comparing them with the systems in other states. Concludes that New York system is far too complex.

JEVONS, H. S. *The art of economic development (continued).* V. *Principles of finance.* Indian Journ. Econ., July, 1918. Pp. 34. The definition and scope of finance. Taxable capacity, and the economic returns from different classes of expenditures.

JÈZE, G. *Les finances de guerre de la France: les nouveaux impôts de guerre: enumération; rendement probable; appréciation; la question des impôts directs et des impôts indirects.* Rev. Sci. Légis. Finan., July-Sept., 1918. Pp. 61. A critical discussion of the theories underlying the French system of taxation.

KAHN, O. H. *Observations on important war problems of the United States.* Econ. World, Oct. 19, 1918. Pp. 4. Advocates a wider range of taxation, especially more consumption taxes.

MANIERRE, C. E. *"Value" in real estate assessment.* Bull. Nat. Tax Assoc., Nov., 1918. Pp. 3. Interesting discussion based on legal decisions and New York's experience.

MARRIOTT, J. A. R. *National expenditure.* Edinburgh Rev., July, 1918.

NOYES, G. R. *Fallacies of war finance. How taxation and bonds should pay for the war.* Yale Rev., Oct., 1918.

POWELL, H. M. *Should the excess profits tax be deducted in computing the New York franchise tax?* Bull. Nat. Tax Assoc., Dec., 1918. Pp. 7. Finds that the state law does not authorize deduction.

RAFFALOVICH, A. *Quelques problèmes financiers résultant de la dislocation de l'Autriche.* L'Econ. Franc., Nov. 23, 1918. Pp. 2. Discusses the future of the public debt and points out the extent of French investments in Austria prior to the war.

SELIGMAN, E. R. A. *Post-bellum fiscal projects in Great Britain and France.* Bull. Nat. Tax Assoc., Dec., 1918. Pp. 3. A discussion of the capital levy based on English and French books on the subject.

SKELTON, O. D. *Canadian federal finance.* II. Bull. Dept. Hist. in Queen's Univ., Oct., 1918. Pp. 34. A critical survey of Canadian war finance, comparisons with other countries, and suggestions for improvements.

SURET, L. *La dette austro-hongroise et la situation nouvelle de la double monarchie.* L'Europe Nouvelle, Nov. 9, 1918. Pp. 4. Traces the growth of the war debt and recommends its assumption by the new states formed out of the empire on the basis of income tax collections.

WOOD, E. M. *Assessment and taxation of property in Manitoba municipalities.* West. Munic. News, Nov., 1918. Pp. 3.

The alternatives to protection. New Statesman, Sept. 21, 1918. Pp. 3. Advocates nationalism as a means of meeting foreign competition.

A criticism of local taxation in England. Land Values, Oct., 1918. Pp. 2. Describes the basis of taxation, exemptions, and applications of the law.

Federal taxation of income from state and municipal bonds. Econ. Wld., Oct. 19, 1918. Pp. 2. Discusses the proposal from both the legal and the economic points of view.

Income tax plans of House and Senate compared. Annalist, Dec. 30, 1918. Pp. 2.

Japan's general budget for the financial year 1918-1919. Econ. Wld., Dec. 7, 1918. Pp. 2. Plans increased expenditures for public defense and public works and corresponding increases in revenues from taxes and loans.

The New York state legislative budget and financial measures for 1918. Munic. Research, No. 93, 1918. Pp. 135. Traces the development of the present legislative budget system, examines its working, and demands that it be given up in favor of an executive budget.

Receipts of the state government. Cal. Taxpayers' Journ., Dec., 1918. Pp. 9. A statistical study of the receipts of the state for a period of years.

Report on the war revenue bill. Bull. N. Y. Chamb. Comm., Oct., 1918. Pp. 8. Finds taxes too high and their incidence too limited.

Section of pending revenue bill relating to inventories. Bull. N. Y. Chamb. Comm., Nov., 1918. Pp. 12. When inventories must be used to determine net income, allowance should be made for increases in the cost of merchandise.

Insurance and Pensions

(Abstracts by Henry J. Harris)

Albu, A. *Die Einwirkung der Ernährung, insbesondere der Kriegsernährung, auf die Lebensdauer.* Ann. d. ges. Versicherungswesens, Oct. 17, 24, 31, Nov. 7, 14, 1918. Pp. 15. Mortality of persons over 60 has increased to a marked degree; tuberculosis has increased especially among the poorer classes; children and young persons have suffered from insufficient food but as yet there are no data available to show an increase of mortality; inmates of institutions show higher mortality. In general the defective nutrition of the war has not reduced the duration of life in Germany.

Ashley, C. H. *Decreasing debts on endowment assurances.* Journ. Inst. Actuaries, Oct., 1918. Pp. 10. Where the investment element appeals to the assured (as in the case of unmarried young men), the decreasing debt system can be used for sub-standard lives. Gives tables, graphs and formulas for such system.

Buser, G. *Vollwertversicherung, Bruchteilversicherung und Versicherung auf "Erstes Risiko."* Ann. d. ges. Versicherungswesen, Aug. 1, 8, 15, 1918. Pp. 2, 2, 2. Review of law and practice in fire, burglary, etc., insurance.

Daly, T. F. *Government in private business.* Econ. Wld., Oct. 12, 1918. Pp. 3. The government in the insurance business would destroy initiative and stop progress.

Devinck, R. *Les assurances sur la vie et la guerre.* L'Europe Nouvelle, Oct. 26, 1918. Pp. 2. Most of the French policies contained clauses sus-

pending them during war. In the after-war period new forms of policy must be provided, more equitable and more in accordance with public welfare.

DOUGLAS, E. C. *The essential facts about annuities.* Econ. Wld., Nov. 6, 1918. Pp. 2. Advantages, forms, uses, etc.

ELSTER, A. *Kinderfürsorge im Rahmen der Sozialversicherung.* Zeitschr. f. d. ges. Versicherungswis., Oct., 1918. Pp. 10. The sickness and the invalidity-survivors' insurance have benefits directly affecting the welfare of children; they should be developed.

FORT, F. W. *What is needed for the development of retrocession re-insurance in the United States.* Econ. Wld., Nov. 23, 1918. Pp. 4. Outline of needed legislation to promote this feature of the fire insurance business.

HARDISON, F. H. *Fire insurance agency and brokerage problems.* Econ. Wld., Nov. 2, 1918. Pp. 2.

HOFFMAN. *Die Kriegsgesetze für die deutsche Krankenversicherung.* Oester. Zeitsch. f. öff. und priv. Versicherung, Vol. 8, Heft 2, 1918. Pp. 17. Summary of the German laws up to January, 1918.

HOFFMAN, F. L. *The social and economic failure of German compulsory health insurance.* Econ. Wld., Dec. 14, 21, 1918. Health insurance was instituted to prevent the spread of socialism but failed to do so; its effect has been to encourage malingering.

HOMANS, I. S. *Life insurance casualties in the great war.* Econ. Wld., Oct. 5, 1918. Pp. 5. In spite of the increased death rate caused by the war (and this has been considerable) it has not caused a mortality in excess of the tabular rate. In Canada in 1917 the war caused an increase in the death claims of 26.3 per cent.

JOSEF, E. *Zur Frage des Schadenerstazes bei Massnahmen der Feuerwehr.* Zeitschr. f. d. ges. Versicherungswis., Oct., 1918. Pp. 10.

KOEGLER, K. *Die österreichische Sozialversicherung während des Krieges.* Zeitsch. f. d. ges. Versicherungswis., Oct., 1918. Pp. 19. Summary of laws, decrees, etc., issued during the war. General health of civil population and the death rate affected very unfavorably during the war.

MITTERMUELLER, E. *Die private deutsche Lebensversicherung im Kriege.* Jahrb. f. Nat. und Stat., April, 1918. Pp. 28. Experience during previous wars; situation during the years 1914, 1915, 1916. Measures for covering the war risk and means of restoring lapsed policies. Use of war loans as investments for reserves.

SCHNEIDER, K. *Der Abtrennversicherungschein.* Zeitschr. f. d. ges. Versicherungswis., Oct., 1918. Pp. 17. Legal status of the policy form in which the holder cuts off a coupon to indicate to the company his acceptance of the contract.

SCHWEIGHAEUSER, F. *Die Schätzungskommission in Privatversicherungsrecht.* Oester. Zeitsch. f. off. und priv. Versicherung, Vol. 8, Heft 2, 1918. Pp. 9. Law and practice in regard to the use of arbitration committees in determining facts in fire, etc., insurance.

WERNEBURG, DR. *Zum Recht des Hypothekengläubigers an der Versicherungsforderung.* Ann. d. ges. Versicherungswesen, Aug. 22, 1918. Pp. 3. Review of law and decisions on the right of mortgage holder to insurance of burned property.

WHITTALL, W. J. H. *Notes on some recent developments of pension problems in America.* Journ. Inst. Actuaries, Oct., 1918. Pp. 12. Review of the experience of the Carnegie Foundation.

WOKUREK, L. *Sozialversicherung und Fürsorge fur Kriegsinvalide.* Oest. Zeitsch. f. off. und priv. Versicherung, Vol. 8, Heft 2, 1918. Pp. 12. The sanatoria etc., of the Austrian insurance system are being used for the care of injured soldiers.

WYLER, J. *Die Tontinen im modernen französischen Versicherungswesen.* Zeitschr. f. d. ges. Versicherungswis., Oct., 1918. Pp. 13. The tontine societies are showing poor returns to participants.

Das französische Versicherungsmonopol. Ann. des ges. Versicherungswesen, Aug. 29, 1918. Pp. 2. Reviews the proposal of the French government to make reinsurance a state monopoly.

Health insurance. Am. Assoc. for Lab. Legis. Rev., Dec., 1918. Pp. 15. Year's developments towards health insurance legislation, statements of prominent labor organizations and of prominent men in favor of such legislation.

Life insurance in New Zealand in 1916. Econ. Wld., Oct., 1918. Pp. 2. The companies report smaller new business than in 1915, deaths have continued to increase (war causes), and lapses and surrenders have decreased.

Pauperism, Charities, and Relief Measures

(Abstracts by George B. Mangold)

BALL, I. C. *History and methods of the Society of St. Vincent de Paul.* Cath. Char. Rev., Oct., 1918. Origin and organization of the society; its growth and spread throughout the world. Some suggestions are given as to improvement in methods of work.

BARDSWELL. *Colonies for consumptives.* Char. Organ. Rev., Oct., 1918. The program and work of a number of colonies is briefly given with a summary of the probable rôle of the colony plan in the future.

BARDSWELL. *The social aspect of the problem of the consumptive in relation to a comprehensive scheme.* Char. Organ. Rev., Nov., 1918. According to this article the English insurance acts have been of considerable value in making possible sanitorium treatment of consumptives. Case histories are presented to indicate the nature of the social service problem and how it has been met.

GADSBY, M. A. *Economic aspects of the disabled soldier problem with particular reference to Canada.* Mo. Lab. Rev., Sept., 1918. A short account of the Canadian methods of training and placing disabled soldiers. Valuable statistics.

WALLACE, G. L. *The type of feeble-minded who can be cared for in the community.* Bull. Mass. Commission on Mental Diseases, Apr., 1918. States that most communities contain conditions that make them unsafe for any unsupervised feeble-minded persons. With adequate supervision, however, young children, lower grade cases, unattractive girls, and children with good homes, can be retained in the community.

Rehabilitation of the wounded. Ann. Am. Acad., Nov., 1918. More than twenty articles are grouped under three heads: rehabilitation, economic independence, and elements in a constructive program for rehabilitation. Some of them deal with methods of work now in operation; others point the way to more effective service in meeting the new need that the disabled soldier presents.

Statistics and Its Methods

CLARK, E. *A phase of the external statistical needs of American business.* Quart. Pubs. Am. Stat. Assoc., June, 1918. Pp. 8.

COATS, R. H. *The coördination of vital statistics in Canada.* Econ. Wld., Aug. 24, 1918. Pp. 2.

DAY, E. R. *A note on King's articles on "The correlation of historical economic variables and the misuse of coefficients in this connection."* Quart. Pubs. Am. Stat. Assoc., June, 1918. Pp. 4.

DITTMER, C. G. *An estimate of the standard of living in China.* Quart. Journ. Econ., Nov., 1918.

EDGEWORTH, F. Y. *The doctrine of index numbers according to Professor Wesley Mitchell.* Econ. Journ., June, 1918. Pp. 22.

EDGEWORTH, F. Y. *On the value of a mean as calculated from a sample.* Journ. Royal Stat. Soc., July, 1918. Pp. 9.

FALKNER, R. P. *The scope of business statistics.* Quart. Pubs. Am. Stat. Assoc., June, 1918. Pp. 6.

HATHAWAY, W. A. *Internal and external statistical needs of American business.* Quart. Pubs. Am. Stat. Assoc., June, 1918. Pp. 15.

KOPF, F. W. *Committee work in federal statistics and legislation for the fourteenth and subsequent decennial censuses.* Quart. Pubs. Am. Stat. Assoc., Sept., 1918. Pp. 7.

LACY, M. G. *Sources of agricultural statistics.* Library Journ., Dec., 1918. Pp. 7.

LOTKA, A. J. *The relation between birth rate and death rate in a normal population and the rational basis of an empirical formula for the mean length of life given by William Farr.* Quart. Pubs. Am. Stat. Assoc., Sept., 1918. Pp. 10.

MARVIN, D. M. *Occupational propinquity as a factor in marriage selection.* Quart. Pubs. Am. Stat. Assoc., Sept., 1918. Pp. 20.

MOIR, H. *In the wake of influenza.* Am. Underwriter, Dec., 1918. Pp. 7.

WESTERGAARD, H. *On the future of statistics.* Journ. Royal Stat. Soc., May, 1918. Pp. 16.

NOTES

As so many of the members of the American Economic Association were engaged in war work and absent from their posts and customary addresses, it was thought inadvisable to publish the *Hand Book* in the summer of 1918. Plans are now being made, however, to issue the *Hand Book* to be sent out in the near future. Members should send changes of address to the Secretary's office in Ithaca, N. Y., at an early date.

The following names have been added to the membership of the American Economic Association since November 1, 1918:

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Pattee, Fred B., Monmouth, Ill.
Paxton, A. B., Wheeling, W. Va.
Phillips, F. Rees, Pennsylvania Bldg., Philadelphia, Pa.
Posner, Louis S., 15 Broad St., New York City.
Price, H. Bruce, Connecticut Agricultural College, Storrs, Conn.
Reitell, Charles, Bureau of Standards, Washington, D. C.
Rennick, Percival G., Peoria, Ill.
Richardson, John H., 305 Maryland Trust Bldg., Baltimore, Md.
Robinson, Ralph, 1307 Continental Bldg., Baltimore, Md.
Romer, Rose, 429 Majestic Bldg., Detroit, Mich.
Rosenberry, Marvin B., Madison, Wis.
Rothschild, Richard C., 250 West 103d St., New York City.
Rounds, Arthur C., 96 Broadway, New York City.
Russell, Bert, 171 Patent Office, Washington, D. C.

Ryan, Charles J., 215 Montague St., Brooklyn, N. Y.
Ryder, Oscar B., 1460 Belmont St., Washington, D. C.
Salling, M. T., 316 West Fourth St., Cincinnati, Ohio.
Sano, Shichiro, Sanjodori, Kyoto, Japan.
Saxton, Pierre W., 195 Broadway, New York City.
Schreiter, Henry, 21 East 40th St., New York City.
Scoville, G. P., Dept. of Farm Management, Ithaca, N. Y.
Seay, E. T., 4th and 1st National Bank Bldg., Nashville, Tenn.
Shaulis, Lloyd L., War Trade Board, Washington, D. C.
Shaw, Alejandro E., Buenos Airies, Argentine Republic, S. A.
Sheehan, James M., 4625 Woodlawn Ave., Chicago, Ill.
Sheffield, William P., 223 Thames St., Newport, R. I.
Sherman, Adrian F., Drear-Leslie Bldg., Kansas City, Mo.
Sickel, H. S., Jr., 16 S. Broad St., Philadelphia, Pa.
Simpson, Kemper, The Marlborough, Baltimore, Md.
Smith, Edward J., 36 Neil Block, Nashville, Tenn.
Speer, William H., 29 Bentley Ave., Jersey City, N. J.
Splawn, Dean W. M. W., Belton, Texas.
Sprankle, B. F., Bloomington, Ill.
Steinhaus, Isaac, 233 Broadway, New York City.
Stevenson, Russell A., 1136 E. College St., Iowa City, Iowa.
Stewart, Charles A., Treasury Dept., Washington, D. C.
Stewart, Charles L., 322 Washington Ave., Fayetteville, Ark.
Sweetser, Frank L., 112 Academy St., Poughkeepsie, N. Y.
Tait, Edwin E., 1004 Union Bank Bldg., Pittsburgh, Pa.
Taylor, John Robert, 41 Park Row, New York City.
Thompson, William D., 526 Main St., Racine, Wis.
Thornton, Lewis H., The Breakers, Miami Beach, Fla.
Thurston, Charles S., 12 Coulter Bldg., Saranac Lake, N. Y.
Tyson, Francis, University of Pittsburgh, Pittsburgh, Pa.
Vaughan, Ernest H., 30 Sever St., Worcester, Mass.
Vaughan, George, 800 Battery St., Little Rock, Ark.
Van Ordsall, Mrs. C. C., 394 Taylor St., Portland, Ore.
Vinson, William A., 201 Gulf Bldg., Houston, Texas.
Walsh, John J., Norwalk, Conn.
Wangenheim, Julius, 148 West Juniper St., San Diego, Calif.
Warburg, Paul M., 17 East 80th St., New York City.
Warfield, John D., E. & C. Bldg., Denver, Colo.
Warner, C. B., 79 Wall St., New York City.
Warner, James H., 25 Broad St., New York City.
Warriner, R. C., Dept. of Agriculture, Washington, D. C.
Warshow, Herman, 1735 U. St., N. W., Washington, D. C.
Watson, J. T., Tampa, Fla.
Weissman, Randolph L., 1421 41st St., Brooklyn, N. Y.
Wells, E. Burton, Johnstown, N. Y.
Wickes, Frank B., Ticonderoga, Essex Co., N. Y.
Wickham, Almeron, 919 Gaunt St., Gloucester City, N. J.
Winkler, M. H., 59 Wall St., New York City.
Winter, Wilber M., 505 West Wardman Courts, Washington, D. C.

Wheeler, William G., 2616 Lake View Ave., Chicago, Ill.
White, Edward, 1835 Oregon Ave., N. W., Washington, D. C.
Whitehead, John M., Janesville, Wis.
Whittington, W. M., Greenwood, Miss.
Woerner, William F., 802 Times Bldg., St. Louis, Mo.
Wolf, Robert B., 36th and Chestnut Sts., Philadelphia, Pa.
Woodward, J. B., Wilkes-Barre, Pa.
Young, Owen D., General Electric Co., 120 Broadway, New York City.
Zimmerman, Isidore, 238 West 106th St., New York City.

The Sixth National Foreign Trade Convention will meet in Chicago April 24-26. Information may be obtained from O. K. Davis, secretary of the National Foreign Trade Council, 1 Hanover Square, New York City.

The annual meeting of the Michigan Academy of Science will be held at Ann Arbor, April 2, 3, and 4.

Announcement has been made that prizes offered by Hart Schaffner & Marx for 1918 have been awarded as follows: In Class A, first prize was granted to Harleigh H. Hartman for a paper entitled "The meaning and application of 'fair valuation' as used by utility commissions"; second prize to Howard Douglas Dozier for a paper entitled "A history of the Atlantic Coast Line Railroad." No prizes were awarded under Class B.

The National Industrial Conference Board (15 Beacon St., Boston) offers a prize of $1,000 for the best monograph on any one of the following subjects:

1. A practicable plan for representation of workers in determining conditions of work and for prevention of industrial disputes.
2. The major causes of unemployment and how to minimize them.
3. How can efficiency of workers be so increased as to make high wage rates economically practicable?
4. Should the state interfere in the determination of wage rates?
5. Should rates of wages be definitely based on the cost of living?
6. How can present systems of wage payments be so perfected and supplemented as to be most conducive to individual efficiency and to the contentment of workers?
7. The closed union shop versus the open shop: their social and economic value compared.
8. Should trade unions and employers' associations be made legally responsible?

Manuscripts must be mailed on or before July 1, 1919.

The University of Wisconsin has established a chair in the department of economics on the subject of Americanization. Professor Lescohier, formerly of the Bureau of Labor of Minnesota, has been appointed to this position.

Announcement is made that Professor William Z. Ripley of Harvard University, late Administrator of Labor Standards in the War Department, and subsequently appointed successor to Ex-Governor Bass as a representative of the United States Shipping Board on the National Adjustment Commission, has been elected chairman of that body. The National Adjustment Commission is a court of appeal for all labor disputes from local bodies at the different ports on matters concerning marine and dock labor. Throughout the war governmental agencies, such as the War and Navy Departments and the Shipping Board, have preponderated in its affairs, but plans are under consideration through which it is hoped that a transition to a system of industrial self-government for purely private enterprise may be set up.

The program of the New School for Social Research (Emma Peters Smith, executive secretary, 465 West 23d St., New York) lists the following lecturers: Thorstein Veblen, James H. Robinson, Charles A. Beard, Emily J. Putnam, Wesley C. Mitchell, Ordway Tead, Harold J. Laski, and Frederick W. Ellis. Courses in employment administration are given in coöperation with the National Training School for Public Service and the Bureau of Industrial Research.

The Bureau of Municipal Research in New York under the leadership of Dr. Charles A. Beard is undergoing a rapid expansion and is to become a national training school for public service. It is establishing special courses for professional training in the fields of industrial sanitation, industrial safety, industrial statistics, and special training courses for public management service. The Bureau of Industrial Research in coöperation with the National Training School for Public Service will have charge of the courses in employment administration and industrial relations. It is planned to carry on the present type of intensive training course, prolonging the period from six to eight weeks. A new type of intensive seminar course will be introduced, open only to a limited number of students who have successfully completed the intensive training courses or who are otherwise clearly qualified. Employment managers will be given opportunity to work out, under guidance, the special problems of their respective fields of employment. It is planned to open several new courses in this field next autumn. They will be designed to meet the needs of

various groups of people, such as those in the public employment service, and those doing vocational work in the public schools or conducting evening extension courses.

The Carola Weorishoffer Department of Social Economy at Bryn Mawr College established in June courses designed to prepare college women for industrial work. In addition to training already offered in industrial investigation, statistics, constitutional questions affecting social problems, and psychological tests, a seminary in labor questions was arranged for and a course in industrial supervision and employment management. Miss Anna Bezanson conducts this new branch of the work and also directs the field laboratory work. Through the War Labor Policies Board coöperation has been secured with manufacturers in New England and in Philadelphia. Thus far the experiment has proved successful and it is probable that the course will become a regular part of the work of the department.

The Library of Congress announces the acquisition of two volumes of William Blathwayt's papers. One contains a record of the Office of Trade and Plantations, 1682-1688; the other, an account of revenues in America, 1702-1712.

The National Tax Association, although it abandoned the conference for 1918, has decided to publish the 1918 volume of proceedings.

Professor C. M. Thompson and Dr. M. H. Hunter, of the University of Illinois, have prepared a book of *Exercises and Problems in the Principles of Economics.*

D. Appleton and Company is soon to publish a book entitled *Organized Labor in American History,* written by Frank T. Carlton of Albion College.

A forthcoming book of timely interest is *The Farmer and the New Day,* by President Kenyon L. Butterfield, of the Massachusetts Agricultural College. It will be issued by Macmillan Company. This company is also publishing a revised and enlarged edition of *History of Economic Thought,* by Lewis H. Haney; and a book on the *Labor Market,* by Professor D. D. Lescohier.

The McGraw-Hill Company will publish a book on *International Goodwill,* by Professor John R. Commons, which is designed for employers, engineers, and others interested in industrial management.

The sixty-eighth annual edition of *Stock Fluctuations,* compiled by Benjamin Fisher and published by the Financial Publishing Company (17 Joy St., Boston) will include, in addition to stock fluctuations for

the year 1918, authentic data about United States government bonds with the record of change in government debt and range of quotations for United States government bonds from 1855 to January 1, 1919.

D. Appleton and Company announces a series of books under the title of Problems of War and Reconstruction. Of the thirty volumes planned the following are for immediate publication: *Government Organization in War Time and After,* by W. F. Willoughby; *Government Insurance in War Time and After,* by Samuel McCune Lindsay; *The Colleges in War Time and After,* by Park R. Kolbe; *The Redemption of the Disabled,* by Garrard Harris; *The American Air Service,* by Arthur Sweetser; *The Strategy of Minerals,* by George R. Smith; and *Commercial Policy in War Time and After,* by W. S. Culbertson.

The Athenaeum Literature Department (10 Adelphi Terrace, London, W. C. 2, England) has issued as numbers 1 and 2 in its series of Social Reconstruction pamphlets *The Rural Problem,* by Arthur W. Ashby (pp. 40, 6d.) and *Taxation and Social Reconstruction,* by Arnold N. Shimin (pp. 32, 6d.); also the following three reprints from "The Athenaeum": *The Politics of Industry. An Examination of the Whitley Report* (pp. 15, 1d.); *Capitalism and Education* (pp. 12, 2d.); and *The Industrial Outlook: No Man's Land,* by O. P. I. P. (pp. 16, 1d.). Two further pamphlets in this connection are *The Meaning of Reconstruction,* by Demos (pp. 75, 1s.) and *The 1918 Education Act Explained,* by Arnold S. Rowntree (pp. 12, 2d.)

The Division of Labor Administration of the Working Conditions Service in the United States Department of Labor is issuing semimonthly bulletins on questions relating to the administration of labor forces in industry. Two bulletins have already appeared, No. 1 on *Centralized Employment Departments* and No. 2 on *Industrial Medical Service.*

A *Guide to United States Government Publications,* compiled by Walter I. Swanton is issued as Bulletin, 1918, No. 2 from the Bureau of Education, Department of the Interior (Washington, Supt. Docs., 20c.).

The *American Labor Legislation Review* completes its eighth year with an issue entitled Foundations for Reconstruction. Articles are presented on a national employment service, workmen's compensation, vocational rehabilitation, health insurance, war time employment of women, working hours for women, minimum wage legislation, and maintenance of protective labor standards.

The Municipal Reference Library *Notes* for November 13, 1918, has several pages of bibliography relating to reconstruction problems.

Harvard University Committee on Economic Research announces the publication of a review devoted to economic statistics.

The Industrial League Journal (56 Victoria St., Westminster, S. W. 1, London, England) is a new English periodical which is devoted to the improvement of relations between employers and employed.

Since the preparation of the lists of new books the following have been received:

R. Bachi, *L'Italia economica nel 1917* (Turin: La Riforma Sociale).

Dwight E. Beebe, *Retail Credits and Collections* (New York: Harper & Brothers).

Arthur W. Calhoun, *A Social History of the American Family from Colonial Times to the Present,* vol. III, *Since the Civil War* (Cleveland: Arthur H. Clark Co.).

Thomas Nixon Carver, *Principles of Political Economy* (Boston: Ginn).

W. H. Glasson, *Federal Military Pensions in the United States* (Oxford University Press).

Reuben McKitrick, *The Public Land System of Texas, 1823-1910* (University of Wisconsin).

T. W. Overlach, *Foreign Financial Control in China* (New York: Macmillan).

J. Taylor Peddie, *Economic Reconstruction. A Further Development of "A National System of Economics"* (New York: Macmillan).

D. P. Smelser, *Unemployment and American Trade Unions,* Johns Hopkins University studies in historical and political science, series XXXVII, no. 1 (Baltimore: Johns Hopkins Press).

W. F. Willoughby, *The Problem of a National Budget* and *The Movement for Budgetary Reform in the States* (Appleton).

Appointments and Resignations

Professor Avard L. Bishop, of the Sheffield Scientific School, Yale University, has been transferred from the chair of geography and commerce to the professorship of business administration and is head of the department of business administration.

Professor Roy G. Blakey, of the University of Minnesota, has resigned as economist and trade specialist in the War Trade Board to

become associate director of the Economics Section of the Savings Division in the Treasury Department at Washington.

Mr. P. H. Brown has been appointed an assistant in the department of economics at the University of Illinois.

Dr. Alexander E. Cance has been granted leave of absence from the Massachusetts Agricultural College to enter upon overseas educational work with President K. L. Butterfield. He will serve as subject-matter specialist in agricultural economics and will be absent until October, 1919.

Professor Paul T. Cherington has returned from Washington to Harvard University.

Dr. E. J. Clapp, of New York University, is serving as expert with the Information and Education Service in the Department of Labor at Washington.

Mr. Arthur H. Cole, instructor in economics at Harvard University, and lately connected with the Quartermaster Corps of the War Department, has been appointed a special expert of the United States Tariff Commission.

Professor M. T. Copeland has returned from Washington and has resumed directorship of the Bureau of Business Research at Harvard University.

Dr. John Lee Coulter, of West Virginia University, is one of the regional directors with President Butterfield now in France.

Professor W. W. Cumberland, of the University of Minnesota, has been sent to Paris by the War Trade Board as an economist and statistician to assist the American Commission to Negotiate Peace.

Mr. George W. Doonan has been appointed lecturer in foreign trade at Northwestern University School of Commerce.

Professor F. R. Fairchild, of Yale University, has been conducting an investigation of the public debts of the belligerent powers for the State Department.

Professor W. F. Gephart, dean of the School of Commerce and Finance, Washington University, St. Louis, is serving as general manager of the St. Louis Wholesale Grocers' and Jobbers' Association on a part-time basis for six months.

Dr. Ralph E. Heilman has been granted leave of absence from

Northwestern University School of Commerce to serve on the Shipbuilding Labor Adjustment Board at New York City.

Professor R. H. Hess, of the University of Wisconsin, is in charge of the accounts, records, and statistics of the American Expeditionary Force in France.

Mr. G. Charles Hodges, formerly of Washington State College, has just returned from an investigation of conditions in the Far East and has been appointed lecturer in foreign trade at New York University.

Dr. J. H. Hollander, of Johns Hopkins University, has been appointed by the United States Fuel Administration as umpire between the mine workers and the coal operators of the Maryland and Upper Potomac district.

Professor George Burton Hotchkiss, of New York University has returned from Washington to his academic duties.

Mr. Eric L. Kohler has returned to his duties as assistant professor in acounting at Northwestern University School of Commerce.

Dr. William M. Leiserson has been granted leave of absence from Toledo University and has become chief of the Division of Labor Administration, Working Conditions Service, United States Department of Labor.

Dr. Henry C. Metcalf has resigned his position as head of the department of economics at Tufts College and will be associated with Mr. Ordway Tead as co-director in developing, in coöperation with the Bureau of Municipal Research in New York City, the Bureau of Industrial Research, and the New School for Social Research, courses for the training of personnel managers.

Professor Herbert E. Mills was dean of the training camp for nurses conducted at Vassar College during the past summer under the auspices of the American Red Cross and the National Council of Defense.

Professor N. Mukherjee who was appointed professor of Indian economics in the Diocesan College for Girls in Calcutta in July, 1917, has been delivering a series of lectures in general economics as well.

Miss Mabel Newcomer was promoted in June from an instructorship to an assistant professorship in economics at Vassar College.

Professor W. A. Paton, of the University of Michigan, has resigned as trade expert in the War Trade Board to become income tax auditor in the Bureau of Internal Revenue.

Miss Margaret Pryor was in June appointed instructor in economics in Vassar College.

Professor Frank U. Quillin has been promoted to acting dean of the College of Commerce and Business and director of all afternoon and evening sessions, at Toledo University.

Dr. I. M. Rubinow has been appointed director of the American Zionist Medical Unit and has left for a year's stay in Palestine.

Dr. Earl A. Saliers, of Yale University, is with the Committee on Education and Special Training. He is accountant for the second district, comprised of New York and New Jersey.

Mr. David J. Saposs has severed his connection with the New York State Bureau of Statistics and Information and is associated with Professor Leiserson's division of the Study of Methods of Americanization that is being conducted by the Carnegie Corporation. Mr. Saposs' work will be concerned with the industrial and economic amalgamation of the immigrant and his headquarters will be at Toledo University.

Professor Horace Secrist has completed his work with the United States Shipping Board and returned to Northwestern University School of Commerce.

Mr. Fred M. Simons, Jr., has been appointed lecturer in business organization at Northwestern University School of Commerce.

Dr. Ernest R. Spedden is conducting a course in money and banking for the Y. M. C. A. School of Commerce in Baltimore and also for the Baltimore chapter of the American Institute of Banking.

Professor O. M. W. Sprague has returned from Washington to Harvard University.

Mr. Arthur E. Swanson has resigned from the position as dean of the School of Commerce at Northwestern University School of Commerce.

Mr. C. R. Titlow has resigned as director of the extension department at West Virginia University and has become secretary of the Federal Land Bank at Baltimore.

Capt. R. S. Tucker has been appointed instructor in economics at Harvard University.

Lt. R. W. Valentine has been appointed assistant in the department of economics at the University of Illinois.

Associate Professor Homer B. Vanderblue has returned to Northwestern University School of Commerce.

Professor G. O. Virtue is now with the Federal Trade Commission and his leave of absence from the University of Nebraska has been extended to September, 1919.

Miss Sydnor H. Walker has been appointed instructor in economics at Vassar College.

Mr. John D. Willard has been appointed extension professor of agricultural economics at the Massachusetts Agricultural College.

Professor Allyn A. Young, as economic adviser to the American delegates, is now with the President's party attending the Peace Conference.

Professor Arthur N. Young, of Princeton University, has gone to Spain as special commissioner of the Department of Commerce to make an investigation of financial conditions.

Mr. Simon E. Twining, instructor in economics at Indiana University, died at Washington, January 7, 1919, while absent on leave for work with the Federal Trade Commission.

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THE REVENUE ACT OF 1918[1]

The Revenue act of 1918 which was signed by the President February 24, 1919, is the fourth great revenue measure of a notable series enacted during the present administration. The long delay in its passage has greatly handicapped the Treasury Department in the administration of collection and has been a cause of uncertainty and annoyance to business and taxpayers of all classes. In May, 1918, the President addressed the Congress urging that body to give prompt attention to this problem even at the cost of the customary summer vacation; on June 5, the Secretary of the Treasury advised Mr. Kitchin, chairman of the Ways and Means Committee, that the bill should provide for raising eight billion dollars, one third of the estimated expenses of the government for the coming year on a war basis; on September 3, the committee presented to the House of Representatives a bill estimated to raise this amount. In presenting his report Mr. Kitchin said: "In making the decision to recommend that one third of the expenditures for the current year be raised by taxes and two thirds from the sale of bonds, your Committee has been guided by conditions existing at the present time." The bill was passed by the House September 20, and the next day was referred by the Senate to the Committee on Finance.

The House increased existing tax rates, added new taxes and evinced some appreciation of the desirability of raising a substantial part of the government's requirements by taxation. But its hasty action and the radical revision of its bill by the Senate in connection with the Revenue act of 1917 led the public to expect similar results in connection with this measure so that it discounted the House bill and looked forward to the Senate's action.

While the measure was under consideration by the Senate Committee two important events occurred which necessitated changing plans. One was the passage of an act regulating the sale and manufacture of alcoholic beverages from July 1, 1919, until after

[1] Although approved February 24, 1919, and by customary practice entitled to be called the Revenue act of 1919, Section 1405 of the law itself reads "That this Act may be cited as the Revenue Act of 1918."

the demobilization of the army. This prohibition measure reduced the estimated yield from the tax on beverages by 500 million dollars. The other event was the signing of the armistice, which brought with it a reduction in the estimated expenditures of the government from approximately 24 billion dollars to 18 billion dollars. As a result the bill as submitted to the Senate provided for raising 6 billion dollars. "Taxes which can be easily borne amid the feverish activity and patriotic fervor of war times are neither so welcome nor so easily sustained amid the uncertainties, the depreciating inventories and the falling markets which are apt to mark the approach of peace," said Mr. Simmons in his report upon presenting the bill to the Senate December 6. After the bill had been passed by the Senate and while it was in conference, the Department of State announced that the prohibition amendment to the Constitution had been ratified by the requisite number of states so that the estimated yield of the new measure was again reduced by over half a billion dollars.

The chief objection to the bill on the part of the Senate minority when it was before that branch of Congress was to the provision which fixed the rates for 1920. They argued that it was advisable to wait until conditions for that year could be ascertained, while the majority held that the taxpayers were entitled to know in advance what they were to pay. Another consideration which the advocates of this provision might well have mentioned is the administrative advantage of being able to plan for the collection of the tax. Senator La Follette presented a report in which he made a plea for increasing the amount to be raised by taxation, and for eliminating the proposed taxes on occupations, amusements (especially the cheaper kind), freight and passenger rates, and consumption taxes generally, substituting therefor a heavy tax on luxuries and war excess profits. Senator Smoot presented some additional views in which he advocated raising practically the entire revenue from a 1 per cent sale tax on consumption goods. Senator Thomas described the excess profits feature as "arbitrary, unjust, and indefensible" and objected to the inheritance tax on the ground that it was an encroachment upon the taxing power of the states.

The Senate finally passed the bill December 23. About six hundred changes had been made in the House bill, hence the Conferees had a difficult undertaking. The greatest difficulties were over the rates of the excess profits tax. The Conferees managed to reach

an agreement on February 1 and the bill was signed by the President and became law February 24.

The law as finally enacted provides for raising about 6 billion dollars, four fifths to be from income and war excess profits taxes and one fifth from taxes on luxuries and semi-luxuries. The sources of revenue are almost the same as those of the act of September 8, 1916, as amended by the act of October 3, 1917, but the income and war excess profits taxes are expected to raise a larger proportion of the total than in the previous laws. The accompanying table (Table 1) shows: (1) the actual yield of the act of 1917 for the fiscal year of 1918; (2) its estimated yield for the fiscal year of 1919 if not amended or superseded; (3) the estimated revenues provided for by the recent House bill; and (4) the amount expected to be raised by the act of 1918. The estimated yield of the bill as passed by the Senate is not included because there is little difference between it and the act which was finally passed. The most striking new features in the law are the tax on the employment of child labor and a tax on the sale of luxuries to be paid by the purchaser.

The act is composed of fourteen sections or titles as follows:

I—General Definitions.
II—Income Tax.
III—War Excess Profits Tax.
IV—Estate Tax.
V—Tax on Transportation and Other Facilities and Insurance.
VI—Tax on Beverages.
VII—Tax on Cigars, Tobacco and Manufactures thereof.
VIII—Tax on Admissions and Dues.
IX—Excise Taxes.
X—Special Taxes.
XI—Stamp Taxes.
XII—Tax on Employment of Child Labor.
XIII—General Administrative Provisions.
XIV—General Provisions.

Title I—General Definitions. This title merely contains definitions of terms which apply to the whole bill; for example, definitions of such terms as "person," life insurance company," "domestic," "foreign," and "taxpayer."

Title II—Income Tax. (*a*) *Individuals.* The law provides for a normal tax of 6 per cent upon the first $4,000 of one's income above the exemptions allowed, and 12 per cent on the remainder. On income received after the taxable year of 1918, the rates are 4 and 8 per cent respectively. One of the confusing things in the

TABLE 1.—COMPARATIVE REVENUES. YIELD OF ACT OF 1917 AND ESTIMATED YIELD OF ACT OF 1918.[1]
(In millions of dollars)

Sources of revenue	Act of 1917 fiscal year 1918	Act of 1917 estimated yield 1919	Act of 1918 House bill	Act of 1918 for a 12-months' period[4]
II—Income tax				
Individual	$930.0	$930.0	$1482.2	$1432
Corporation	528.5	528.5	894.0	775
III—Excess profits tax	1791.0	1791.0	3200.0	2500
IV—Estate tax	47.5	75.0	110.0	60
V—Transportation				
Freight	30.0	75.0	115.0	115
Express	6.5	20.0	15.0	14
Persons	24.3	60.0	75.0	75
Oil by pipe lines	1.5	3.5	4.5	5
Seats and berths	2.2	5.0	6.0	6
Telegraph and telephone	6.3	14.0	17.0	17
Insurance	6.5	12.0	13.0	14
VI—Beverages	300.0	400.0	85.0[2]	75
VII—Tobacco	155.2	212.1	346.3	249.9
VIII—Admissions	26.4	50.0	95.0	50
Club dues	2.3	4.0	8.0	3.5
IX—Excise taxes				
Automobiles	24.0	41.5	120.0	71
Jewelry, sporting goods, etc.	13.0	35.0	70.5	60
Other taxes on luxuries			265.0	143.7
Gasoline			40.0	
Yachts and pleasure boats			1.0	1
X—Special taxes				
Capital stock	25.0	25.0	80.0	80
Brokers	.3	.8	1.8	1.2
Theatres	.9	1.1	2.5	2.1
Mail order sales			5.0	
Bowling alleys, billiard and pool tables	1.1	1.1	2.5	2.5
Shooting galleries			.4	.4
Riding academies			.05	.05
Business license tax			10.00	
Manufacturers of tobacco, cigars, etc.	.5	.6	74.2[3]	2.8
XI—Stamp taxes	18.8	32.0	32.0	31
XII—Employment of child labor				
Floor taxes				50
Total	$3,941.7	$4,317.2	$7,170.9	$5,788.15

[1] Compiled from the reports of chairmen Kitchin and Simmons.

[2] Original estimate $1,137,000,000. Reduction due to prohibition and food conservation features of food stimulation bill.

[3] Includes $72,000,000 from the tax on use of automobiles and motorcycles omitted in the bill as finally passed.

[4] It should be noted that the Act of 1918 did not become effective until February 24, 1919. The estimated revenue receipts under the existing law and the Revenue act of 1918, for the fiscal year ending June 30, 1919, are $6,077,200,000; and under the Revenue act of 1918 for the fiscal year ending June 30, 1920, are $4,184,510,000.

previous law was the fact that there were two rates (2 and 4 per cent), due to the fact that the act of October, 1917, did not repeal, but was superimposed upon, the act of September, 1916. A normal tax of 2 per cent was levied under each, though exemptions were $2,000 larger in the earlier law. From an administrative standpoint it is unfortunate that Congress kept a similar complication in the new law.

The following table shows the normal tax rates imposed by all of the recent income tax laws.

TABLE 2.—RATES OF NORMAL TAX OF THE FOUR INCOME TAX LAWS (PER CENT).

Amount of net income	1920 (Act of 1918)	1919 (Act of 1918)	1917[1]	1916	1913
0-$1,000	exempt	exempt	exempt	exempt	exempt
$1,000- 2,000	4[2]	6[2]	2[2]	"	"
2,000- 3,000	4	6	2	"	"
3,000- 4,000	4	6	4[3]	2[2]	1[2]
4,000- 5,000	4	6	4	2	1
Over 5,000	8	12	4	2	1

[1] As in effect 1917. The act of 1917 provided for a 2 per cent rate to be superimposed upon the rates of the 1916 law, though with different exemption allowances as indicated.

[2] Applicable only to income of single persons or of married persons not living with wife or husband.

[3] For heads of families and married persons the rate was only 2 per cent.

In addition to the normal tax, a surtax is imposed on incomes of over $5,000. The surtax rates of last year increased by 1 per cent for every $2,500 over $5,000, up to $20,000; thence by steps of about 4 per cent until they reached a maximum of 63 per cent on amounts in excess of $2,000,000. Under the new law, the rates increase by 1 per cent for every $2,000 increase of income from $6,000 to $100,000; thence by smaller steps until a maximum of 65 per cent is reached on amounts in excess of $1,000,000. The changes made by the Senate decreased slightly the rates upon incomes of $200,000 and less, but increased somewhat the rates upon larger incomes. Table 3 shows the surtax rates as imposed by the various acts.

The personal exemption is the same as in the act of 1917; that is, $1,000 for a single person or for a married person who is not living with wife or husband; and $2,000 for a married person living with wife or husband, or for a person who maintains a home for one or more dependents. Under the former law a person who was married on December 31 was entitled to the whole exemption. According to the most reasonable interpretation of the new law,

Net Incomes		Act of 1918		Act of 1917[2]		Act of 1916		Act of 1913	
From	To	Rate	Total[1] surtax	Rate	Total[1] surtax	Rate	Total[1] surtax	Rate	Total[1] surtax
		(%)		(%)		(%)		(%)	
$5,000	$6,000	1	$10	1	$10				
6,000	7,500	2	40	1	25				
7,500	8,000	2	50	2	35				
8,000	10,000	3	110	2	75				
10,000	12,000	4	190	3	135				
12,000	12,500	5	215	3	150				
12,500	14,000	5	290	4	210				
14,000	15,000	6	350	4	250				
15,000	16,000	6	410	5	300				
16,000	18,000	7	550	5	400				
18,000	20,000	8	710	5	500				
20,000	22,000	9	890	8	660	1	$20	1	$20
22,000	24,000	10	1,090	8	820	1	40	1	40
24,000	26,000	11	1,310	8	980	1	60	1	60
26,000	28,000	12	1,550	8	1,140	1	80	1	80
28,000	30,000	13	1,810	8	1,300	1	100	1	100
30,000	32,000	14	2,090	8	1,460	1	120	1	120
32,000	34,000	15	2,390	8	1,620	1	140	1	140
34,000	36,000	16	2,710	8	1,780	1	160	1	160
36,000	38,000	17	3,050	8	1,940	1	180	1	180
38,000	40,000	18	3,410	8	2,100	1	200	1	200
40,000	42,000	19	3,790	12	2,340	2	240	1	220
42,000	44,000	20	4,190	12	2,580	2	280	1	240
44,000	46,000	21	4,610	12	2,820	2	320	1	260
46,000	48,000	22	5,050	12	3,060	2	360	1	280
48,000	50,000	23	5,510	12	3,300	2	400	1	300
50,000	52,000	24	5,990	12	3,540	2	440	2	340
52,000	54,000	25	6,490	12	3,780	2	480	2	380
54,000	56,000	26	7,010	12	4,020	2	520	2	420
56,000	58,000	27	7,550	12	4,260	2	560	2	460
58,000	60,000	28	8,110	12	4,500	2	600	2	500
60,000	62,000	29	8,690	17	4,840	3	660	2	540
62,000	64,000	30	9,290	17	5,180	3	720	2	580
64,000	66,000	31	9,910	17	5,520	3	780	2	620
66,000	68,000	32	10,550	17	5,860	3	840	2	660
68,000	70,000	33	11,210	17	6,200	3	900	2	700
70,000	72,000	34	11,690	17	6,540	3	960	2	740
72,000	74,000	35	12,590	17	6,880	3	1,020	2	780
74,000	75,000	36	12,950	17	7,050	3	1,050	2	800
75,000	76,000	36	13,310	17	7,220	3	1,080	3	830
76,000	78,000	37	14,050	17	7,560	3	1,140	3	890
78,000	80,000	38	14,810	17	7,900	3	1,200	3	950
80,000	82,000	39	15,590	22	8,340	4	1,280	3	1,010
82,000	84,000	40	16,390	22	8,780	4	1,360	3	1,070
84,000	86,000	41	17,210	22	9,220	4	1,440	3	1,130
86,000	88,000	42	18,050	22	9,660	4	1,520	3	1,190
88,000	90,000	43	18,910	22	10,100	4	1,600	3	1,250
90,000	92,000	44	19,790	22	10,540	4	1,680	3	1,310
92,000	94,000	45	20,690	22	10,980	4	1,760	3	1,370
94,000	96,000	46	21,610	22	11,420	4	1,840	3	1,430
96,000	98,000	47	22,550	22	11,860	4	1,920	3	1,490
98,000	100,000	48	23,510	22	12,300	4	2,000	3	1,560
100,000	150,000	52	49,510	27	25,800	5	4,500	4	3,560
150,000	200,000	56	77,510	31	41,300	6	7,500	4	5,560
200,000	250,000	60	107,510	37	59,800	7	11,000	4	7,560
250,000	300,000	60	137,510	42	80,800	8	15,000	5	10,060
300,000	500,000	63	263,510	46	172,800	9	33,000	5	20,060
500,000	750,000	64	423,510	50	297,800	10	58,000	6	35,060
750,000	1,000,000	64	583,510	55	435,300	10	83,000	6	50,060
1,000,000	1,500,000	65	908,510	61	740,300	11	148,000	6	80,060
1,500,000	2,000,000	65	1,233,510	62	1,050,300	12	208,000	6	110,060
2,000,000	†	65		63		13		6	

[1] Total surtax due on highest amount in each bracket.
[2] As in effect 1917: that is, the acts of September, 1916, and October

however, a person married for only part of the year is entitled to such part of the total exemption of $2,000 as that part of the year is of the whole year.[2] It will be remembered that the acts of 1913 and 1916 placed the exemptions at $3,000 and $4,000. Because of the lowered exemption and the added rates the act of 1917 allowed an extra exempton of $200 for each "child," a term construed by the Treasury Department in a very literal sense to mean a "blood child of the first degree or an adopted child." The new law grants this additional exemption for each "dependent person," thus wiping out one of the unfair distinctions of the former law.

The following items are exempt from taxation and do not have to be reported on the income tax returns: (1) proceeds of life insurance policies paid upon the death of the insured; (2) amounts received as a return of premium paid under life insurance endowment or annuity contracts; (3) the value of property acquired by gift or bequest (but the income from such property shall be included in the gross income); (4) interest upon obligations of a state, territory, or of any political subdivision thereof, or the District of Columbia, or upon bonds of the United States to the extent provided for in the acts authorizing the issue thereof; (5) income of foreign governments from investments in the United States; (6) amounts received through accident or health insurance or under workmen's compensation acts or the amount of damages received on account of injuries or sickness; (7) income derived from any public utility or the exercise of any essential governmental function and accruing to any state, territory, or subdivision thereof, or the District of Columbia; (8) the amount received during the present war by a person in the military or naval forces of the United States for active service in such forces. The first four provisions are the same as in the previous law. The sixth was allowed during part of last year by a Treasury decision.

The law is not entirely clear as to the taxing of income received by state officials. Such income was specifically exempt under the act of 1917. In drawing up the new act the House faced the issue squarely and inserted a clause "including in the case of the President of the United States, the judges of the Supreme and inferior courts of the United States, and all other officers and employees, whether elected or appointed, of the United States or of any state,

[2] The income tax forms 1040 and 1040A were gotten out in accordance with this interpretation, but an office order of March 10 provided that the marital status of December 31 should determine the exemption for the entire year.

Alaska, Hawaii or any political subdivision thereof or the District of Columbia, the compensation received as such." This was struck out by the Senate Committee but was restored by the Conferees except that the word "state" was omitted. Thus the law may be interpreted either way, for the clause "or any political subdivision thereof" might logically be held to include a state; but on the other hand omitting the word "state" would imply the intention to exempt such income. There is certainly no very good economic or social reason why this large class should be exempt, but even if specifically included the courts would probably hold that the case of *Collector* v. *Day*[3] still furnishes precedent for the rule that taxing the salary of a state official is interfering with the functions of a state.[4] There is good constitutional authority for not taxing the compensation of the President and judges of the United States during the terms of office for which they had been chosen when the law was passed.[5]

The law as finally passed provided for returns to be filed on a net income basis as heretofore. The Senate provision was for a gross income basis; that is, every one who received over $1,000 or $2,000, according to his marital status, was to file a return, regardless of whether the deductions relieved him from liability to the tax or not. Under such a provision the government instead of the individual would have been the judge of whether or not he should pay a tax. This is certainly the more desirable principle, and by this method some revenue would have been received which will be missed, but it is rather doubtful whether it would have compensated for the enormous task of getting these returns filed, particularly in view of the short time which the Bureau of Internal Revenue had to prepare for the collection.

In computing net income a taxpayer may deduct the following items in connection with business or any transaction entered into for profit: (1) expenses incurred in carrying on such business, (2) losses not compensated for by insurance or otherwise, (3) depreciation of property, and (4) bad debts. Deductible expenses which are not incurred in business are limited to such items as (1) taxes, except those assessed against local benefits tending to increase the value of the property, (2) interest, except on indebtedness incurred to purchase obligations interest on which is tax exempt,

[3] Decided December, 1870. 11 Wallace 113.

[4] The "Regulations" which have been recently issued by the Bureau of Internal Revenue hold that income received from a state should not be reported as taxable income.

[5] Article III, Sec. I.

other than United States bonds, (3) losses of property if arising from fire, storm or other casualty or theft, if not compensated for by insurance. In general there is a little more generosity in the matter of deductions than under the former law, though there are still many inconsistencies. For example, a business man who must take a street car or train to work cannot deduct car fare as a business expense, yet a man who owns an automobile may claim depreciation and upkeep if he uses it in his business. Perhaps in this case the trouble lies more with the regulations than with the law.

Several features of the new law attempt to remedy obviously unfair provisions in the former laws. One difficulty arose over the question of taxing dividends paid out of earnings accumulated in previous years. As heretofore, such earnings are exempt from the normal tax in the hands of the stockholder. In cases of this kind, there are two possibilities: (1) to tax the dividend when it was received by the stockholder, or (2) to tax it when earned by the corporation. It seems unjust to make a taxpayer pay the rates of the 1917 law, if, for example, the dividend was earned in 1916. On the other hand, it is not fair to allow the recipient of a large income to escape a tax merely by stating that the dividends he received were paid out of 1916 earnings.

The act of 1917, when followed literally, caused equally difficult problems. It was necessary to know the total profits earned for the periods between declarations of dividends in 1917; and if this amount was not sufficient to cover the dividend actually distributed the difference might be allocated to a previous year. As a matter of fact, most corporations pay their dividends out of earnings of a previous year. The House bill provided that all distributions of earnings were to be taxed according to the rates in effect during the year in which the dividend was received. The Senate Finance Committee struck out this section and inserted one which was practically like that in the 1917 law, but when the bill was before the Senate it limited the provision to stock dividends received in 1918, and the Conferees further restricted it to "stock dividends received between January 1 and November 1, 1918, or declared in this period and received after November 1 and before 30 days after the passage of the act." This means that any dividend except a stock dividend received in this period shall be taxed at the rates prescribed by law for the year in which the dividend was received.

The question of the constitutionality of taxing stock dividends has not yet been settled. The acts of 1916 and 1917 unlike the

act of 1913 specifically provided that stock dividends were taxable. Hence the decision of the Supreme Court, which stated that stock dividends are not taxable under the act of 1913,[6] may not apply to the other acts. The decision was made on the ground that a stock dividend is merely a distribution of capital. In a recent case before the United States District Court of the Southern District of New York the same ruling was made; and, since this case involved the act of 1916, the decision was given that the section of that act which provided for taxing stock dividends was unconstitutional.[7] The case has been appealed to the Supreme Court and if this decision is upheld the acts of 1916, 1917, and 1918 will all be affected.

There will undoubtedly be some difficulty over the distinction between dividends of a personal service corporation[8] and dividends of other kinds of corporations. Since profits of the former are taxable in the hands of the stockholders or members, any distribution made by such a concern in 1918 is not considered a dividend and must be included in the income upon which a normal tax is paid unless there is satisfactory evidence given that this was paid out of earnings upon which the income tax had already been paid.

Payment at the source, as in the Revenue act of 1917, is limited to tax-free-covenant bonds and to income of non-resident aliens. In the latter case it is without doubt the best policy. In the former it raises several interesting problems. The act of 1917 stated that a 2 per cent normal tax was to be withheld by the debtor corporation. If exemption from the normal tax was claimed by the taxpayer, a certificate to that effect was filed with the obligor. In most cases this was probably only a theoretical withholding. When the rates were increased in the new bill, the corporations who issued these bonds seem to have found themselves in a more difficult situation than they had ever dreamed of. The wording of the new law apparently gives them a loophole to escape part of the tax for it requires the corporation to "deduct and withhold 2 per cent." The normal tax being 6 per cent on taxable incomes under $4,000 and 12 per cent on larger incomes there still remains a 4 per cent and possibly a 10 per cent tax to be paid by the obligee for which, according to the terms of most agreements,

[6] *Towne* v. *Eisner*, decided Jan. 7, 1918. 242 Fed. Rep. 702.

[7] *McComber* v. *Eisner*, decided Jan. 23, 1919.

[8] A personal service corporation is defined as one in which capital is not a material income-producing factor and whose income is due primarily to the activities of the principal owners or stockholders who are themselves regularly engaged in the active conduct of the affairs of the corporation.

he is to be reimbursed. Bonds issued recently limit this agreement to a tax of 2 per cent. The law seems to require a violation of contract, but the attitude of the government has been that it is a matter between the corporation and the bondholder and so long as the tax is paid, it cares not who pays it.

In view of the higher rates, there have been inserted several provisions to prevent undue hardship. One of the most needed is that which allows deduction of loss incurred in "any transaction entered into for profit" instead of limiting deductible losses to those sustained in a "regular business," or to losses from fire, storm, or other casualty not compensated for by insurance. Other relief provisions are those allowing deductions of net losses. One is to take care of losses incurred between October 31, 1918, and January 1, 1920, in connection with the taxpayer's regular business or the sale of plant machinery and vessels contributing to the prosecution of the war. The other is to take care of losses sustained as a result of the reduction of the value of the inventory for the taxable year or from actual payments after the close of the taxable year in pursuance of contracts entered into during the year.

A few improvements in administrative features should be mentioned. By providing four dates for payments of the tax, and by allowing individuals to file returns according to a fiscal year, not only will taxpayers be convenienced but the collectors will be given "year 'round jobs" instead of work for only a few months of each year. This should mean better office management. At first appearance one might think this would increase the expense. The collectors and most of the deputies, however, are in the permanent employ of the service, and buildings and offices are owned or leased for long periods of time. In fact, the cost of collecting each dollar of internal revenue has decreased materially in spite of the increasing work involved.[9] Another improvement is the method of adjusting refunds. Instead of the former long red tape method, taxes paid in previous years in excess of the amount due

[9] TABLE 4.—EXPENSE OF COLLECTING INTERNAL REVENUE.

Year	*Per cent*
1912	1.57
1913	1.50
1914	1.46
1915	1.50
1916	1.22
1917	.86
1918	.32

(Report of Secretary of the Treasury, 1918, pp. 491-92.)

may be credited against any income, war profits, or excess profits taxes due.

Of the administrative features which should still be improved, the most prominent is that in the case of a taxpayer who reports partnership profits for a different fiscal year than his own. If part of the partnership profits are for 1917, the rates of 1917 are to apply to that part. The difficulty which arises in this case is to determine not only whether it is a 2 per cent or 4 per cent rate, but also how to pro-rate the personal exemption. The law provides also for allowing as a credit the taxpayer's proportionate share of dividends and interest on bonds issued by the United States which were received by the partnership. The law regulating the amount of interest from Liberty Bonds free from tax is a most complicated and ambiguous measure,[10] and, when it is made more complex by attempting to pro-rate and credit the interest, the taxpayer is apt to consider the time and trouble of making the calculations worth more than the allowable deduction.

Title II—Income Tax. (*b*) *Corporations.* The second part of the income tax law deals with corporations. Partnerships and "personal service corporations" are not taxable as corporations, but the profits are taxed as income of the individual partners or stockholders. With these exceptions, the list of corporations which are not subject to this section of the income tax reads very much the same as in former laws. It includes labor or horticultural organizations, mutual savings banks not having a capital stock represented by shares, fraternal beneficiary societies or orders, civic leagues, clubs organized for pleasure, and similar organizations. The Senate inserted a special section dealing with life insurance companies but this was struck out by the Conferees.

The rate prescribed for the taxable year 1918 is 12 per cent; that for 1919, 10 per cent. The House proposal was for a much

[10] For two years after the expiration of the war there shall be exempt:

1. Interest on bonds of the Fourth Liberty Loan, the principal of which does not exceed $30,000.

2. Interest received after January 1, 1918, on amount of bonds of the first loan converted December 15, 1917, or May 9, 1918; of the second loan, converted or unconverted, the principal of which does not exceed $45,000, providing that no such exemption shall be allowed on interest from bonds the principal of which exceeds one and one half times the amount of the Fourth loan, originally subscribed for and still held.

3. Interest on bonds issued upon conversion of those of the first to those of the fourth the principal of which does not exceed $30,000.

In addition to the above, there is a permanent exemption of interest received from bonds of all issues the principal of which does not exceed in the aggregate $5,000.—Section I of the Supplement to the Second Liberty Bond act approved September 24, 1918.

more complicated scheme, namely, "18 per cent of the amount of the net income in excess of the credits . . . provided that the rate shall be 12 per cent upon so much of this amount as does not exceed the sum of (1) the amount of dividends paid during the taxable year, plus (2) the amount paid during the taxable year out of earnings or profits in discharge of bonds and other interest bearing obligations outstanding prior to the beginning of the taxable year, plus (3) the amount paid during the taxable year in the purchase of obligations of the United States issued after September 1, 1918. . . ." The distinction between the rates on the amount distributed as dividends and other earnings was made so as to encourage distribution of profits and thus more surtax would be paid by individuals.

In computing the tax a corporation may credit: (1) the amount received as interest upon obligations of the United States, (2) the amount of excess profits tax imposed by the United States, (3) in the case of domestic corporations, income and excess profits taxes paid to any foreign country or possession of the United States, and $2,000. Among the allowable deductions is included such part of the cost of amortization of buildings or vessels used in the war, or contributing to the prosecution of war, as had been borne by the taxpayer. A special provision was made by the Senate to take care of cases in which the taxpayer had discovered oil and gas wells or mines on or after March 1, 1913, and where the fair market value upon which depreciation would ordinarily depend is materially disproportionate to cost. The allowance for depletion and depreciation is to be based on the fair market value of the property on the date of discovery or within twelve months thereafter. In the final enactment "twelve months" was changed to "thirty days." Experience under the act of 1917 proved that some such provision as this was needed.

One of the interesting new administrative features is that requiring consolidated returns by companies which are affiliated. Only one specific credit is allowed, so that in all probability this will mean more revenue to the government, though equally convincing data have been produced on both sides of the question. The law states that two or more corporations shall be deemed to be affiliated "if one corporation owns directly or controls through closely affiliated interests or by a nominee substantially all the stock of the other or others. . . ." Just what is meant by "substantially all the stock" will doubtless have to be settled by the courts.

In order to prevent corporations from accumulating their profits so that taxpayers would be relieved of paying surtax on dividends, the law states that if a corporation is formed or availed of for this purpose, the corporation is not subject to tax but the stockholders or members shall be taxable as in the case of a partnership or personal service corporation. "The fact that any corporation is a mere holding company or that the gains and profits are permitted to accumulate beyond the reasonable needs of the business shall be prima facie evidence of a purpose to escape the surtax; but the fact that gains and profits are in any case permitted to accumulate and become surplus shall not be construed as evidence of a purpose to escape the tax unless the Commissioner certifies that in his opinion such accumulation is unreasonable for the purposes of the business." Under the act of 1917, an additional tax of 10 per cent was levied upon the amount of earnings which remained undistributed, except such amounts as were employed in the business or invested in obligations of the United States.

The law provides for the same informational returns as the previous act, that is, they are required from those paying out salaries, interest, rent or other profits or income of or at the rate of $1,000 or more per year, and they may be required from (a) those collecting interest on bonds or similar obligations of corporations, (b) those collecting interest on bonds and dividends from foreign corporations, (c) stockbrokers. It is rather surprising that the stockbroker group was included, for last year the forms were not even printed.

Title III—War Excess Profits Tax. As suggested by the title given this section, the Senate combined two methods of reaching large profits and those which were earned by reason of the war. The rates are as follows (for 1918):

1st bracket—30 per cent of the amount of the net income in excess of the excess profits credit and not in excess of 20 per cent of the invested capital.

2d bracket—65 per cent of the amount of the net income in excess of 20 per cent of the invested capital.

3d bracket—The sum, if any, by which 80 per cent of the amount of the net income in excess of the war profits credit exceeds the amount of tax computed under the first and second brackets.[11]

[11] A simple example may show more clearly how these taxes would be computed.

The A company has a capital of $100,000, average pre-war net income $7,000 and a net income for the taxable year of $75,000.

The excess profits credit will be $3,000 plus 8 per cent of the invested

For the taxable year 1919, the rate of levy under the first bracket is reduced to 20 per cent, that of the second to 40 per cent, and the third is omitted. But in order to reach "war profits" a clause was inserted by the Conferees taxing the net income of every corporation which derives more than $10,000 from any government contract made between April 6, 1917, and November 11, 1918.

As passed by the House, these two methods were separated and the corporation was to use whichever was higher. The Senate amendment has accomplished the same result in a much more desirable way.

The new law has given up the excess profits tax at the flat rate of 8 per cent which was imposed last year upon amounts over $6,000 received by individuals and corporations from business having insignificant amounts of invested capital. Hence the excess profits tax now applies only to corporations having invested capital.

A small corporation is often at a disadvantage when the tax depends on the relation between its invested capital and its income because the amount of credit is based on invested capital. For this reason a relief section was inserted to apply to such cases. It states that the tax for the year 1919 shall not be more than (1) 30 per cent of the amount of net income in excess of $3,000 and not in excess of $20,000 plus (2) 80 per cent of the amount of net income above $20,000. For 1920 the rates are reduced to 20 per cent and 40 per cent of these amounts respectively.

The credits allowed in computing the excess profits tax are (a)

capital, a total of $11,000. The amount of the net income taxable at each rate of the excess profits tax will be as follows:

(1) In excess of the credit and not in excess of 20 per cent of the invested capital ($20,000-$11,000) $9,000

(2) In excess of the invested capital ($75,000-$20,000) $55,000

The rate on the amount in the first bracket is 30 per cent, the second 65 per cent, hence the tax is 30 per cent of $9,000 ($2,700) plus 65 per cent of $55,000 ($35,750), a total of $38,450.

The war profits credit will be $3,000 plus $10,000 (10 per cent of the invested capital), a total of $13,000.

Net income in excess of the credit ($75,000-$13,000) = $62,000

80 per cent of $62,000 is $49,600.

$49,600-38,450 = $11,150, war profits tax.

The normal tax of this company would be $2,808.

The total tax due is therefore as follows:

Normal tax	$2,808.00
Excess profits	38,450.00
War profits	11,150.00
TOTAL	$52,408.00

Under the 1917 law, the total tax would have been $35,836.00

$3,000 and (b) an amount equal to 8 per cent of the invested capital for the taxable year.

The "war profits credit" is (a) $3,000 and (b) an amount equal to the average net income of the corporation for the pre-war period (1911, 1912, 1913) plus or minus, as the case may be, 10 per cent of the difference between the average invested capital for the pre-war period and the invested capital for the taxable year. If the amount computed under (b) is less than 10 per cent of the invested capital for the taxable year, or if the corporation had no net income for the pre-war period, the war profits credit is the sum of $3,000 and 10 per cent of the invested capital for the taxable year.

If the corporation was not in existence during the whole of at least one calendar year during the pre-war period, the war profits credit shall be the sum of $3,000 and an amount equal to the same percentage of the invested capital for the taxable year as the average percentage of net income is to invested capital for the pre-war period of corporations engaged in a trade or business of the same general class as that conducted by the taxpayer, provided that it shall not be less than 10 per cent of the invested capital for the taxable year.

Invested capital includes: (1) actual cash paid for stock or shares; (2) actual cash value of tangible property; (3) paid in or earned surplus and undivided profits; (4) intangible property actually exchanged for stock or shares issued therefor, not exceeding (a) the actual cash value of such property at the time paid in, (b) the par value of the stock or shares issued therefor, or (c) in the aggregate 30 per cent of the par value of the total stock or shares of the corporation outstanding on March 3, 1917, whichever is lowest; (5) intangible property (*i.e.*, patents, copyrights, secret processes, goodwill, trademarks, *et cetera*) for stock or shares not exceeding (a) the actual cash value of such property at the time paid in, (b) the par value of the stock or shares issued therefor, or (c) in the aggregate 30 per cent of the par value of the total stock or shares of the corporation outstanding at the beginning of the taxable year, whichever is lowest. The term "invested capital" does not include borrowed capital.

From the invested capital must be deducted a percentage of the invested capital equal to the percentage which the amount of inadmissible assets (securities, the interest from which is tax exempt) is of the amount of admissible assets held during the tax-

able year. This deduction cannot be made in the case of a dealer in securities, an insurance company, a bank or a loan and trust company, which includes all income from inadmissible assets in computing its net income for taxable purposes. This last section was written to prevent discrimination against any business dealing largely in tax exempt securities.

In order to encourage the production of gold, the income received by a corporation engaged in gold mining is exempted from excess profits taxes. This subsidy is unwise. In fact, the general stock of money in the United States now includes over 60 per cent more gold than it did August 1, 1914. The trouble is due to the excess of credit inflation. The natural, automatic, and salutary check to such inflation, namely, the high cost of gold, has begun to operate. For the benefit of the country at large it would be just as well if this business became unprofitable so that a smaller amount of gold would be produced and prices would fall. Certainly there should not be any artificial stimulation of gold output.

The difficulties involved in determining the meaning and interpretation for tax purposes of such terms as "invested capital," and "intangible assets" are shown by the zealous and lengthy attempts to define and explain these terms. After these efforts, which cover several pages of print, there is added in apparent desperation a section which provides a new method for making the computation. In the following cases the tax shall be the amount which bears the same ratio to the net income of the taxpayer as the average tax of representative corporations engaged in a like or similar trade or business bears to their average net income for such year:

a. Where the commissioner is unable to determine the invested capital. . . .

b. In the case of a foreign corporation.

c. Where a mixed aggregate of tangible property and intangible property has been paid in for stock or for stock and bonds and the commissioner is unable satisfactorily to determine the respective values of the several classes of property at the time of payment or to distinguish the classes of property paid in for stock and for bonds.

d. Where upon application by the corporation, the commissioner finds and so declares of record that the tax if determined without benefit of this section would, owing to abnormal conditions affecting the capital or income of the corporation, work upon the corporation an exceptional hardship evidenced by gross disproportion between the tax computed without benefit of this section and the tax computed by reference to representative corporations.

Besides these "special" provisions for computing the tax, there are numerous relief clauses providing for the amortization or obsolescence of property used in the war which cannot be used in business after the war, and providing also for cases in which the net income is abnormally high due to the realization of gains or profits earned during a period of years or from the sale of property, the principal value of which is due to exploration or prospecting by the taxpayer. If the business has been reorganized the tax is to be computed according to regulations prescribed by the commissioner. With all these provisions it seems that there should be no hardship suffered by any corporation.

It would appear at first glance that an 80 per cent tax is high, but it is justly so, for nothing seems quite so unethical as to have a few individuals make a fortune out of a world calamity. In reality, however, the law will reach much less than 80 per cent of war profits because of the credits and exemptions which may be deducted. For example, there is a specific exemption of $3,000, and a deduction of a certain per cent of the invested capital from the net income, computed after the deduction of all business expenses. The minimum rate of this credit or deduction is 10 per cent, which, as has been pointed out in Senator La Follette's report, may be a much larger percentage of the net income. If the profits are 10 per cent of the invested capital, the deduction is 100 per cent of the income.

There are other considerations which must be taken into account in any discussion of war profits taxes. According to Professor Friday's estimates of the national income, the increase was from approximately 30 billion dollars in 1910 to 65 billion in 1917.[12] Of this, the income of industrial organizations increased from 19 billions to almost 49 billions, while commercial and professional incomes increased from 11 billions to 15 billions. This great increase was due partly to the fact that there was an increased output of goods. More laborers were working and they worked more continuously for there were fewer strikes. The second reason is that about 15 billions had been invested in new machinery. There is every indication that dividend payments for 1918 were slightly less than for 1917. Financial, public utility, and railroad corporations will probably show net incomes smaller than in 1917. Dividends of miscellaneous corporations and mercantile corporations are also likely to decrease slightly. If these

[12] David Friday, "Taxable Income of the United States," *Journal of Political Economy*, December, 1918.

assumptions are correct, the taxable incomes of corporations and also of individuals will be smaller in 1919 than they were in 1918. This is an added reason for increasing the war profits tax. Corporate net income for 1917 was about 10.5 billions, for 1918 not quite 10 billions; but the invested capital for 1918 was 4 billion dollars greater than in 1917. Deducting 10 per cent of the invested capital as the law provides leaves a little over 4 billion dollars subject to war profits tax. Of this the tax will reach only about 2.4 billions. Obviously, this is the last opportunity to reach war profits. The amount needed to finance the government, above that raised by taxation, will have to be raised by bonds, thus incurring further obligations for the payment of interest and raising prices by inflation, which will add to the already huge debt and interest burdens besides adding to the inflation which has resulted in such high prices.

Title IV—Estate Tax. Instead of a tax on the transfer of the estate, as the previous law and the recent House bill provided, the Senate provided for a tax on the amount inherited by each beneficiary, regardless of his or her relation to the decedent. The Conferees reinserted the House provision except that they lowered the rates. Property inherited from a person dying during the war, or within one year after its termination, from injuries received or disease contracted in such service is not subject to this tax.

The rates in the new law are somewhat lower than in the previous law for estates of $1,500,000 and less, and they are much lower for all amounts than the rates of the House bill as Table 5 shows.

This tax was looked upon as a kind of encroachment on the rights of the states by at least one member of the Senate Finance Committee. To be sure most states have inheritance taxes, but this is not a sufficient reason for its abandonment by the federal government. Such a tax provides a simple method for getting revenue, and the expenses of the government are so great at this time that every reasonable source should be utilized. Funds thus secured might well be devoted to paying the war debt or be put into capital assets instead of being used for current expenses. The rates of the present law are not so high as to discourage seriously either industry or thrift.

Title V—Tax on Transportation and Other Facilities and Insurance. The tax on the transportation of freight remains at 3 per cent as under the act of 1917; that on tickets also remains at

TABLE 5.—ESTATE TAX RATES.

Amount of net estate[1] between	Rates on net estate (per cent)		
	Act of 1917	Act of 1918 House bill	Act of 1918 as approved
0- $50,000	2	3	1
$50,000- 150,000	4	6	2
150,000- 250,000	6	9	3
250,000- 450,000	8	12	4
450,000- 750,000	10	15	6
750,000- 1,000,000	10	15	8
1,000,000- 1,500,000	12	18	10
1,500,000- 2,000,000	12	18	12
2,000,000- 3,000,000	14	21	14
3,000,000- 4,000,000	16	24	16
4,000,000- 5,000,000	18	27	18
5,000,000- 8,000,000	20	30	20
8,000,000-10,000,000	22	35	22
10,000,000	25	40	25

[1] An exemption of $50,000 is allowed in computing the value of net estate of residents of the United States.

8 per cent; but the rate on seats, berths, or staterooms in parlor cars or sleeping cars has been reduced from 10 per cent to 8 per cent. This change was made because the United States Railroad Administration plans to issue a ticket covering both transportation and Pullman accommodations.

The rate of the tax on telephone, telegram, or cable messages, for which the charge is over 14 cents but not over 50 cents remains at 5 cents, but a new tax of 10 cents has been levied in cases where the charge is over 50 cents. Another new section is that which levies a tax of 10 per cent of the amount paid to any telegraph or telephone company for a leased wire or talking circuit special service except when such service is used by the press, or "in the conduct by a common carrier or telegraph or telephone company of its business as such." With this provision the House estimated it would raise 16 million dollars of revenue from extra taxes upon telephone and telegraph business instead of 6 millions as under the act of 1917.

The rates of taxes on insurance as provided in the House bill were as follows: 8 per cent on each $100 for which a life was insured, except that on policies of $500 or less issued on the industrial or weekly or monthly plan the rate was 40 per cent of the first weekly premium or 20 per cent of the amount of the first monthly premium; for policies of insurance against fire, lightning

or casualty, 1 per cent on each dollar of the premium charged. The Senate amended this section by striking out the above and inserting a provision for levying a tax of 1 per cent of the excess of the gross amount of premiums charged for policies issued by mutual insurance companies over the amount of premiums paid for reinsurance, return premiums, and premiums refunded; in the case of other companies the rates were differentiated—for example, 1½ per cent of such excess in the case of casualty insurance, 2¼ per cent in the case of marine and inland insurance. This change was necessitated by the fact that the Senate inserted a special section in Title II (Income Tax) providing for the taxing of insurance companies. The bill as finally passed follows the House provisions.

It is estimated that about 200 million dollars will be raised by the taxes provided for in this title, of which 75 million will be from the tax on freight, 60 million from the tax on passenger tickets, 5 million from that on seats and berths, 16 million from telegraph and telephone, and 10 million from that on insurance.

Title VI—Tax on Beverages. The tax as levied in this title by the House was expected to raise over a billion dollars, but owing to the regulations passed for limiting the production and sale of alcoholic beverages this estimate was reduced by 500 million dollars.

The Senate Committee revised the rates downward, leaving that of non-beverage alcohol at $2.20 a gallon, the same as under the 1917 law, and reducing the tax on distilled spirits drawn for beverage purposes from $8 to $6.40, double the rate previously levied, in order to secure the greatest possible amount of revenue. Inasmuch as the prohibition amendment has been ratified and goes into effect before the war prohibition measure expires, it is estimated that only $75,000,000 will be yielded by this tax.

The provisions for securing records of the amount of spirits in cisterns, tanks, or containers of any kind are left indefinite: "The Commissioner . . . is hereby empowered to prescribe all necessary regulations relating to the drawing off, transferring, gauging, storing and transporting of such spirits; the records to be kept and returns to be made; the size and kind of packages and tanks to be used, the marking, handling, numbering and stamping of such packages and tanks to be used. . . ." It is well known that this is one of the most difficult of all taxes to assess. The deputy collector goes into a warehouse and has no knowledge, other

than the word of the owner or manager, as to the contents of any of the containers. The law very properly provides for the installation of accurate meters, without which there is every chance for undue influence being brought to bear upon the officer.

One of the provisions of this title places a tax of one cent for each ten cents or fraction thereof paid for all goods bought at a soda fountain. The tax is not high enough to discourage wasteful or unnecessary consumption nor will it bring in much revenue to the government. It will prove a most annoying measure from the taxpayer's point of view and will be difficult of collection, because there is no way of finding out whether these pennies are properly put aside for Uncle Sam or get into the pockets of the dispenser of sundaes.

Title VII—Tax on Cigars, Tobacco, and Manufactures thereof. The rates of tax on manufacturers or importers of cigars, cigarettes, etc., as passed by the House were reduced very noticeably by the Senate. But even so, they are higher than last year. The rates on cigars are from \$1.50 to \$15 per thousand according to the weight and price at which they are to retail; on cigarettes, from \$2.90 to \$7.20 per thousand; on tobacco and snuff, manufactured or imported, 18 cents a pound. Under the act of 1917 the rates on cigars were from \$1 to \$10, on cigarettes from \$2.05 to \$4.80, on tobacco and snuff 13 cents per pound. The floor stock tax on cigars, cigarettes, and tobacco is the difference between the tax paid under existing law and the tax imposed by the new bill. A new section was added which repealed the so-called "free-leaf act" appearing in the act of August 5, 1909. By this provision retail dealers in leaf tobacco carried on their business with no tax liability. Another improvement is the section which provides for better records of the disposition and handling of leaf tobacco. This is one of the cases where the rates should be as high as the traffic will bear.

Title VIII—Tax on Admission and Dues. The rates of tax on admissions are left practically the same as in the previous act, though in one or two cases are increased slightly. The House proposed a 20 per cent tax on admissions over 10 cents. In case tickets are sold by "scalpers" or others at a price not to exceed 50 cents more than the established price, the House rate was 5 per cent, the Senate 10 per cent. When the price is more than 50 cents in excess of the regular price, the rate is 20 per cent; the rate proposed by the House was 30 per cent. A rather compli-

cated clause has been inserted taxing amounts for admissions to cabarets or similar places to which the charge of admission is included in the price paid for refreshments. The law states that in this case, the amount paid for admission is to be considered 20 per cent of the amount paid for refreshments and the tax is to be paid by the person paying for such service. This will probably be confusing for patrons to compute, a nuisance to the manager of the place, and will probably yield a very small amount of revenue, but it may discourage extravagance.

The tax rate on club dues remains at 10 per cent of annual dues and initiation fees amounting to over $10, although the House proposed a rate of 20 per cent. The Senate struck out the House provision which made the tax applicable to dues paid to produce exchanges, boards of trade and similar organizations.

Title IX—Excise Taxes. This section is divided into two parts, the first deals with cases in which the tax is to be paid by the manufacturer, and the second in which the tax is to be paid by the purchaser. Those of the first group are makers of such luxuries as automobiles, musical instruments, tennis rackets, canoe paddles, pleasure canoes if sold for more than $15, firearms, cameras, hunting knives, chewing gum or substitutes therefor, candy, hunting garments, articles made of fur, toilet soap, etc.

Purchasers shall pay a tax of 10 per cent of the amount paid for such articles as the following: picture frames costing over $10 each, purses over $7.50, fans over $1, women's hats over $15, shoes over $10 a pair, waists over $15, men's shirts over $3, men's silk hose over $1 a pair. The House bill provided for taxes on the purchase of women's suits and coats retailing for more than $50, on dresses retailing for over $40, and on men's suits and coats retailing for over $50 each, but the Senate did not concur. It is, of course, difficult to find the marginal price at which necessities become luxuries, but there certainly could have been found some limit above which the purchase prices of suits and coats represent ability to pay a tax.

Taxes such as those provided for in this title may serve one of two purposes: either to provide revenue or to discourage the buying of luxuries. The two results are not likely to be achieved in the same bill, because if the rates are high enough to accomplish the latter, not as much revenue will be produced as if the rates were lower. The higher rates as provided by the House might well have been retained, for the days are not yet passed when we as a coun-

try can afford to abandon the practice of thrift which became popular as well as patriotic during the war.

Some criticism has been made against this method of raising revenue because it will entail entirely new machinery for collection. The difficulties in this respect seem to be more than overcome by the advantages which are secured.[13]

Title X—Special Taxes. This title contains provisions for laying an excise tax on manufacturers of cigars, persons carrying on businesses such as those of corporations, brokers, and proprietors of theaters, museums, bowling alleys, riding academies, breweries, circuses, and passenger automobiles for hire. To the extent that the tax reaches those who would not pay a tax under any of the other provisions, this may prove a desirable "catch all," though it is open to some objections. For example, the law taxes a corporation $1 for each $1,000 over $5,000 of the amount of its assets at the close of its fiscal year, thus taxing a third time those taxable under Titles II and III. Manufacturers of tobacco pay taxes under this Title and also under Title VII. It would save much confusion and unnecessary difficulty in collection if the rates under one title were sufficient to cover all taxes in any particular case. The House proposed a kind of federal license for motorcycles and automobiles which was omitted by the Senate.

The last part of the title provides for a tax on importers, manufacturers, or sellers of opium and other habit-forming drugs. The rates are as follows: importers, manufacturers, producers, or compounders, $24 a year; wholesale dealers $120 a year; retailers $6; doctors, dentists, and others $3; and a further tax of one cent per ounce shall be paid upon such drugs produced, sold, or removed for consumption or sale. This is to take the place of the act of December, 1914, which provided for a tax of $1 to be paid by a manufacturer or vendor of opium, but exempted doctors, dentists, and those who used these drugs in their professions. It has been held by the courts[14] that, under this act, a person having in his possession any habit-forming drugs is not criminally liable unless he is a dealer. This has made enforcement of the act very difficult. The law of 1918 provides that the possession of an unstamped package shall be prima facie evidence of violation of the act.

13 The House passed a resolution March 1, 1919, providing for the repeal of the luxury tax and the Senate was expected to concur, but this measure, along with many others, was killed by the filibuster which occupied the closing hours of the session.

14 The Supreme Court in the Jim Fuey Moy case, June 5, 1916. 241 U.S. 394.

This is certainly one of the taxes which ought to be heavy enough to drive out the business except for medicinal purposes, if there is no better way of accomplishing this end. Any such tax requires a large force of alert and dependable officers to prevent smuggling and evasion of every kind.

Title XI—Stamp Taxes. These taxes are practically the same as last year, that is, they apply to certificates of indebtedness, bonds, certificates of capital stock, the sale of produce on an exchange, deeds, proxies for voting at any election of officers, except religious or charitable societies, power of attorney, and parcel post packages where the postage amounts to 25 cents or more. Such taxes as these are simple from the administrative point of view and yield some revenue. For the fiscal year 1918, 8 million dollars was raised from such a tax, and it is estimated that 31 million dollars will be raised this year.

Title XII—Tax on Employment of Child Labor. This is a clear case of a tax being levied for other than revenue purposes. It was passed to take the place of the child labor law which the Supreme Court declared unconstitutional last June in a five to four decision.[15] There was some discussion in the committee as to whether or not this section of the law is constitutional. It is common practice to insert in revenue bills "riders" of this character.

The law provides for levying a tax of 10 per cent of the net profits of any mine, quarry, mill, cannery, workshop, factory, or manufacturing establishment in which are employed children under sixteen in the case of mines or under fourteen in the cases of any of the other establishments named.

In computing net income, there may be deducted from gross income the cost of raw materials, running expenses, interest on business obligations, taxes, and losses. Provision is made to prevent any person from selling the products of his establishment at less than fair market price by considering for tax purposes that the gross amount received for the year or from the sale is the amount which would have been received if the goods had been sold at the fair market price.

There will be the same difficulty found in administering this law as in other laws in which the age of children must be ascertained. A country should provide for birth registration before attempting legislation of this kind. Especially difficult will be the cases which will arise in the mountain country of the South where par-

[15] *Hammer* v. *Dagenhart,* U.S. 62 L. ed.

ents are ignorant, illiterate, and careless. It is, however, better than no law at all.

Title XIII—General Administrative Provisions. This title is a miscellany of some twenty sections dealing with various phases of administering the law. One of the significant features is the establishment of two boards, a Legislative Drafting Service and an Advisory Tax Board. The former is to be under the direction of two draftsmen, one to be appointed by the President of the Senate, the other by the Speaker of the House of Representatives without reference to political affiliations. Its function is to aid in drafting public bills and resolutions.

The Advisory Tax Board is to be appointed by the Commissioner of Internal Revenue. The number of members is not specified in the law as it was passed, though the House provided for five. From the statement in the law, it looks as though this board would be the present Board of Reviewers under a new name, for their function is to adjust problems which arise in connection with the interpretation and administration of the income tax and war excess profits tax laws.

Title XIV—General Provisions. This is another section containing miscellaneous provisions and several "riders." For example, there is one for the payment of $60 to persons serving in the military or naval forces of the United States who have been discharged since November 11, 1918; another reducing on July 1, 1919, the postage rates on first-class mail matter to those in force October 2, 1917; and another for making the District of Columbia "bone dry." The Conferees struck out a clause which the Senate had inserted for abolishing the zone system of postage rates on second-class mail matter.

Another provision of importance properly belonging with these sections, though included in Title II, was one inserted by the Senate which imposed a tax of 100 per cent on all contributions over $500 made by a person or corporation to any national political campaign, not including expenditures made by candidates out of campaign funds lawfully contributed. Unfortunately it fell by the way in conference.

This amendment required every person who makes an income tax return to state each gift made for influencing an election at which are to be nominated or elected presidential electors or members of the House of Representatives or of the United States Senate. The treasurers or chairmen of all state and congressional

committees were to file returns within 30 days after the passage of the act and within 30 days after an election showing the amount of all gifts, from whom received, and the date received. The administrative machinery for "checking up" had been provided by the act of June, 1910, relative to the publicity of contributions for influencing elections at which members to Congress are elected. This tax should have lessened corruption and other undue influence in elections.

Summary

The most significant feature of the new revenue act is the place it gives the tax on income, including the tax on excess profits, which is merely an extension of the income tax. As mentioned in the introduction, this is the fourth in a series of great revenue measures enacted during the present administration. These four acts have provided for rapidly increasing yields and they exhibit a noteworthy evolution of income tax development, in fact, a striking revolution in federal taxation. Before the war our annual federal revenues and expenditures were less than a billion dollars.[16] Prior to the passage of the Revenue act of 1913, the first of the present administration, about half of the revenues came from taxes on imports, nearly a third from taxes on liquor, and most of the remainder from taxes on tobacco.

The act of 1913 introduced a small tax on incomes and reduced the high tariff which had been maintained by the Republican party with few exceptions ever since Civil War days. Each of the three important succeeding measures has left the tariff practically untouched, but has greatly increased the scope and yield of the income tax. The decline in imports of manufactured goods during the war has tended further to reduce the yield of the tariff; and, as soon as the recent prohibition measures become effective, what used to be the second largest source of federal revenue will be eliminated. The new law provides for a total yield seven times as great as pre-war revenues to be raised from sources other than those on imports and liquor, which together formerly furnished two thirds of the total. The income and excess profits taxes are expected to yield six times the total pre-war revenues and fifteen or sixteen times the anticipated receipts from the tariff and liquor taxes.

[16] If postal revenues and expenditures, which are about equal, are included, the pre-war total was just about a billion dollars.

TABLE 6.—CHIEF SOURCES OF FEDERAL REVENUES.[1]
(In millions of dollars)

Fiscal years	1913		1914		1915		1916		1917		1918	
Source of revenue	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%
Liquors	$230.2	31.7	$226.2	30.8	$223.9	32.1	$247.4	32.1	$279.4	24.2	$443.7	10.4
Tobacco	76.8	10.7	80.0	10.9	80.0	11.5	88.1	10.2	102.23	9.2	156.2	3.7
Income tax												
Individual			28.2	3.9	41.1	5.9	67.9	8.8	180.1	16.2	2838.9[4]	68.1
Corporation	35.0	4.9	32.5	4.3	39.2	5.6	56.9	7.5	179.5	16.1		
Miscellaneous[2] Internal revenue...	2.3	.3	13.2	1.9	31.4	4.5	52.3	7.0	69.1	6.5	255.8	6.3
Internal revenue..	344.4	47.6	380.1	51.8	415.6	59.6	512.7	65.6	809.4	72.2	3694.6	88.5
Tariff	318.9	44.4	292.3	39.7	209.8	30.1	213.2	27.4	226.0	20.3	182.8	4.4
Miscellaneous[3]	60.8	8.0	62.3	8.5	72.4	10.3	53.7	7.0	83.3	7.5	296.6	7.1
Total	724.1	100.0	734.7	100.0	697.9	100.0	779.6	100.0	1118.7	100.0	4174.0	100.0

[1] Compiled from the Reports of the Treasury and Reports of the Commissioner of Internal Revenue 1913 to 1918 inclusive (fiscal years).

[2] Includes taxes on oleomargarine, opium, stamp taxes, etc.

[3] Includes proceeds from sales of public lands.

[4] Includes excess profits taxes of $1,791,000,000. The detailed statistics showing distinction between taxes paid by individuals and by corporations have not yet been published.

The temporary "dry" measure goes into effect July 1, and will continue until after the army is demobilized. This means that it will overlap the date upon which the seventeenth amendment goes into effect, so that henceforth revenues from liquor will be scarcely worth considering. Taxes on tobacco will produce only one thirtieth of the total amount estimated to be raised by the new law. In all of this there has been a movement away from consumption taxes.

Another tendency has been to get more and more away from payment of the tax at the source and toward payment by the recipient of the income. The Revenue act of 1913 provided that those who paid rent, salaries, interest, and other sums should deduct the tax before paying amounts due. This provision did not work satisfactorily. It was unduly expensive and annoying and was repealed upon the recommendation of the Secretary of the Treasury, although England seems to feel that the success of her income tax has been due to its collection at the source. The Revenue acts of 1916 and 1917 substituted information-at-the-source in most cases, and, in the case of two taxes, the act of 1919 goes even farther. These are the taxes on (1) partnership profits and on (2) distributions of personal service corporations. These organizations do not pay any tax, but their profits are taxed to the recipients, as has been stated above. If some method could be devised for reaching the undistributed profits of every corporation, and if their dividends could be taxed as provided for in the case of a personal service corporation, it would eliminate much of the confusion and complexity which now surround the law and which must of necessity continue so long as corporations and individuals are taxed by different methods.

One of the characteristic features of this law as also of its predecessors is the provision for "commissioner made law." In the income tax section alone there are nineteen cases in which regulations are to be made by the Commissioner of Internal Revenue for dealing with special cases. For example, "the net income shall be computed . . . in accordance with the method of accounting regularly employed in keeping the books of such taxpayer; but if no such method of accounting has been so employed, or if the method employed does not clearly reflect the income, the computation shall be made upon such basis and in such manner as in the opinion of the Commissioner does clearly reflect the income." The greatest power given to him is in the section dealing with war excess profits,

where he may levy the taxes of a corporation by "the amount which bears the same ratio to the net income of the taxpayer (in excess of the specific exemption of $3,000) for the taxable year, as the average tax of representative corporations engaged in a like or similar trade or business bears to their average net income . . . for such year." This is to be done only in cases where it is impossible to determine the invested capital or where a taxpayer would be placed in a position of inequality because of the time or manner of organization. The difficulties attending all such cases are enormous and there are bound to be many such problems so long as taxes are based on anything so inherently complicated as invested capital.

Several improvements have been made in the new law, among them the provisions for the allowance of net losses, depletion, and shrinkage of inventories. The new luxury taxes, as well as the old ones, are entirely justifiable at this time. Riders in general are to be condemned, but most social reformers will make no great complaint against the tax on child labor and the provision to make the District of Columbia "bone dry." They would not have objected either if the Conferees had retained Senator Thomas' amendment to put a 100 per cent tax upon political campaign contributions in excess of $500.

On the whole, the law is an improvement over those of previous years, but it leaves too much to be raised by borrowing. Six billions is a huge sum to raise by taxes and will cause many heavy burdens, but excessive borrowing causes still heavier burdens. We agree with Mr. Kitchin and others that it was a mistake to provide for less than 8 billions by taxation even though the war is over. Our military preparations did not attain their maximum until the signing of the armistice and payments of the bills have reached their peak since that time. They have averaged 2 billions per month since the armistice was signed[17] and will probably exceed by a billion or two Secretary McAdoo's estimate of 18 billions for the fiscal year. Furthermore, expenditures for 1920 are likely to be heavy. So called "ordinary" expenditures will be reduced slowly and will never get back to their pre-war level; there will probably be many war contracts not entirely liquidated by June 30 of this year; a billion dollars will be required annually for interest on the war debt; the Secretary of the Treasury has recommended establishing a sinking fund for the gradual paying off

17 This was written in February. Later months have averaged over a billion dollars each.

of the principal of the debt; he has also recommended further loans to former European allies so that they may not curtail too seriously our exports to them during the reconstruction period. Expenditures should be reduced as rapidly as they may be consistently with our obligations, but it does not seem probable that the requirements of 1920 can be met without the issue of bonds or certificates of indebtedness, or other forms of government securities. It is difficult to present convincing arguments why the necessity for future bond issues should not have been reduced by larger levies upon war profits. They are certainly the most legitimate source of war revenues. Many corporations had set aside adequate tax reserves out of such earnings in anticipation of the higher levies. And, besides, they can be collected now before they have been passed on to "innocent" parties more easily and equitably than at any future time.

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CONSIDERATION OF THE PROPOSAL TO STABILIZE THE UNIT OF MONEY

1. *Nature of the proposal to stabilize the dollar and sovereign, etc.* A monetary proposal, in some respects new and extraordinary, has been advanced recently by Professor Irving Fisher and advocated with great skill and dexterity. I shall endeavor to set out the essential features of this proposal and to analyze its soundness.

The consideration upon which it is founded may be stated as follows:

a) Essentially, price merely expresses the system of exchange relationships among commodities.

b) If, therefore, the unit of value is based upon the entire system of price relations, it will necessarily constitute an unchanging unit (excepting in so far as the usage quantitatively changes, old commodities disappear, and new ones come into being.)[1]

c) The adoption of any one commodity (*e.g.*, gold) is (said to be) disadvantageous, since the relation of this to the appropriate (weighted) mean of all the rest fluctuates considerably (a price index, if expressed in terms of a gold unit, will vary greatly).

d) There is no reason to believe that any particular commodity can occupy for any time an unchanging position in regard to the mean exchange-relation of the others.

e) It is desirable, therefore, to abandon any particular commodity as representing the unit of value (it is desirable to demonetize gold), and to substitute a "token" or "certificate" which represents a definite series of quantities of given commodities, constituting what may be called a "composite unit."

f) The relationship of this to gold, which metal is important in balancing exchange, is periodically determined by means of price indexes, which in the new system will vary only by small amounts (so it is presumed).

g) Since the period of adjustment can be made as small as we please (yearly, quarterly, monthly, weekly—presumably monthly as a practical question), the money unit is repeatedly restored to its normal position: consequently, although prices may fluctuate *inter se* as much as ever (in response to demand and supply), the mean purchasing efficiency of the new money unit will remain unchanged, or, to put it more strictly, its variations of mean purchasing power, owing to the periodical price index adjustments, are necessarily only small oscillations about a mean position.

h) Gold (or any other equally satisfactory commodity) may be retained as a medium in which considerable value can be stored in rela-

[1] Professor Fisher does not introduce this factor into the consideration, probably to avoid complicating the presentation of his subject.

tively small compass; but the quantity corresponding to the money unit will be declared officially from time to time.

i) In order to prevent financial manipulations, a charge for converting the money unit into gold should be made: the amount of this charge should correspond approximately to the fluctuations in the money unit represented by the variations in the price index (which it is presumed must always be very small).

This, I think, fully states the new theory. The unit of money is still to be called a "dollar" in America, a "sovereign" in Britain, etc. It will *not*, however, as heretofore, be a piece of gold of definite weight and fineness (a gold coin), but only a "note" or "certificate" guaranteed by the government to be valid, not *actually* for the items of the composite unit (definite quantities of a declared group of commodities), but for their equivalent according to price, and particularly (so it is implied) for gold according to its price, less a conversion charge (seigniorage).

2. *The system involves the demonetization of gold.* Here it may be remarked that the present system of gold coins would necessarily disappear, and instead thereof either gold masses would be stamped with their weight (and fineness, if a standard were not agreed upon), or for convenience a new system of *weight-coins* would be created. These would be so designed that any weight could be made up with them, as with the weights of a balance.

To think in terms of the new system, we must therefore abandon our present conception of metallic money and regard an intrinsically valueless token(a mere certificate or bit of printed paper) as the fundamental unit, this token or certificate, however, representing nominally a definite "composite unit" (that is, given quantities of actual commodities), but actually a varying quantity of one commodity, *viz.*, gold. A "dollar," a "sovereign," etc., in the new scheme is no longer so much gold, but a counter which is legal tender for varying quantities of any commodity, including gold, according to its price at the time, the price in the case of gold, however, being officially declared by stating how many grains or grammes of it a "dollar" or a "sovereign" will purchase; though even then subject to a sort of brassage or seigniorage allowance.

3. *Despite the general demonetization of gold, it is still to retain its unique position.* Let us now look into this matter somewhat closely. The intention to retain gold as a commodity for balancing exchanges is obvious: that is to say, where imports and exports, credits and required commodities cannot be brought into exact balance, gold must pass. The work of the cambist under the

proposed system will be considerably increased but we must let that pass as relatively of no moment. That the price of gold is fixed officially gives it a unique position. Thus the monetary function of gold will be altered nominally rather than really under the proposed scheme.

Upon careful reflection it will soon become self-evident that the scheme does not change in any way the essential relationship of gold and commodities generally, nor does it propose to do so. What it really does is:

a) It substitutes paper money for gold coins (demonetizes gold) and transfers the notion of "constancy of value" to the paper money.

b) It requires future payments to be made in terms of the paper money and therefore in varying proportions of any required commodity (including gold).

4. *In essence the scheme does not differ from that of Jevons.* In the respect indicated the scheme does not differ essentially from Jevons' proposal that account should be taken of the price index in future payments. If it be true, as Professor Fisher affirms, that "by increasing or decreasing the [gold] dollar's weight, we would be . . . providing against either a flood or a drain of money," and that "the plan would put a stop, once for all, to a terrible evil which for centuries has vexed the world, the evil of dislocating contracts and money understandings," it will also be true that exactly the same benefits will be obtained and exactly the same practical result will be achieved if, in order to determine what should be paid to discharge a debt, we multiply it by the ratio of the price index at the date of settlement to that at the time of purchase. Similarly in regard to the payments of wages, fixed salaries, repayments by a bank of deposit, and so on. Thus a wage of 100 shillings, agreed to when the price index was 1200, must become 125 shillings when it has gone up to 1500 (*i.e.*, 100s. $\times$ 1500 $\div$ 1200 = 100s. $\times$ $1\frac{1}{4}$ = 125s.). Similarly, disregarding any question of interest, if a bank receives a deposit of £1,000 when the price index is 1200, it must repay it by handing out £1,333 6s. 8d. when the price index at the date of repayment is 1600 (*i.e.*, £1,000 $\times$ 1600 $\div$ 1200 = £1,000 $\times$ 1 1/3 = £1,333 1/3). (The question of interest payable would, of course, be similarly dealt with.) Thus in the proposed scheme of Professor Fisher, £1,000 would be handed back in paper "certificates," but if paid back in gold it would—in the case supposed—be the

actual weight of 1,333 1/3 of the former "sovereigns," although only the weight of gold of 1,000 such "sovereigns" may have been received by the bank.

5. *The system involves the unique treatment of gold.* It is important to note that there is no apparent reason why gold should be in the unique position advocated unless it is still to fulfil its monetary function. It is not suggested, nor would it be practicable if it were suggested, that any other commodities should be similarly dealt with, though the terms ("involuntary theft," etc.), by which Professor Fisher describes the failure to return coin not of the same weight but of the same purchasing power, would equally apply to any commodity whatsoever. If a bank is to return a larger amount of gold when the price index has risen for what has been deposited, or a smaller amount when it has fallen, why should not the same apply to the temporary holders of wheat, cotton, iron, copper, frozen meat, etc.? If for any reason a farmer were to place 1,000 centals of wheat in the possession of a granary holder, on the understanding that for the free use of it 50 centals of wheat per annum was to be paid and that at the end of two years the whole was to be at the disposal of the depositor farmer; and if, on the two years maturing, a demand were made by the depositor that some 1,650 centals should be returned because wheat had fallen to only two thirds of the original price, the demand would be treated as preposterous; yet the principle sought to be enacted may be regarded as economically identical therewith.

Whenever the commodity that a particular person possesses happens relatively to fall in price he suffers the disadvantage thereof: he is not "cheated" nor is he "robbed."[2] Nor is Professor Fisher's "working girl" (who, having put 100 dollars in the savings bank in 1896, finds in 1918 that, although she has been given 200 dollars for the 100, she can after all purchase only what the 100 would have bought originally) "without the intention of anybody cheated out of all her interest." We may pass the connotative suggestions of the language used as of small moment, and note merely that the same thing virtually happens in every case where a person possesses a stock of commodities that fall in value, and the converse when he possesses commodities that rise in value (ethically all cases of unearned appreciation or depreciation of value are on the same footing).

6. *The real relation of gold to commodities generally not af-*

[2] See Professor Fisher's, *Stabilizing the Dollar in Purchasing-Power*, p. 9.

fected by the proposal. Suppose that we make our "composite unit" so large and representative that it may appropriately be regarded as a *standard*, and therefore, like any other standard, becomes of "fixed value." This means nothing more than that it is that by which we measure value: it is the unit of value (as so many grains or grammes of gold constitute the unit today), and therefore it counts as 1 in values, whatever the relative variations between the exchange relations of its component elements. Let it be supposed that one series of commodities, A, B, C, D, etc., in this composite unit has advanced in relation to another series therein, P, Q, R, S, etc. The possessors of A, B, C, D, etc., will be gainers, and P, Q, R, S, etc., losers, and there is no avoiding this, and "the injured party has no recourse."[3]

If it be financially practicable, which is possibly true, let us further suppose that *all future* contracts in regard to value are to be made in terms of the gold standard as it at present exists, subject, however, to revision of the amount according to price-index ratios; *exactly* the same result will be achieved as will eventuate by Professor Fisher's scheme (in which, by the way, the price of gold must be left out of account, since it is that which is ascertained by the price index based upon the series of other commodities).

7. *What causes the change of price in the present system?* Supply and demand, influenced and modified by a complex of trading manipulations, by the vagaries of fashion, and many other things, really determine the exchange relations of commodities, gold included, as the case stands at present. Whether the quantity theory is substantially true or is not true matters little. The total gold supplies at present are in excess of normal currency requirements though a world war has upset this for a limited period, thus necessitating the creation of temporarily inconvertible paper money. The fact observed is that on the whole there has been a world wide rise in prices *recently*. Doubtless, too much has been made of this, as is evident when we make a more extensive survey of the question.[4] If we combine all the results for wholesale prices and weight them by the populations as at the

[3] *Op. cit.*, p. 13. The representation of the existing economic system as equivalent to a person buying a box of socks and finding the socks had been taken out is not parallel. It is rather this, the box contains a varying number of socks.

[4] A belief that price indexes will perpetually rise is, in my opinion, without justification. Already there are signs of price indexes falling as they fell in the latter half of last century. A belief has arisen that gold supplies will fall short of requirements: if well founded, prices will certainly fall.

time, the following average quinquennial results are obtained, the year indicated being the middle year of the quinquennium: The

Year	1842	1847	1852	1857	1862	1867	1872	1877
Price index....	1067	1001	1004	1096	1205	1360	1249	1065
Year	1882	1887	1892	1897	1902	1907	1912	1916[5]
Price index....	1007	860	821	765	859	944	1021	1533[5]

high value for the price index in the quinquennium, 1865-1869, followed the Civil War of America. It is of course invalid to go back into far distant history for illustrations of the system of relations between gold and other commodities, because we are not able to ascertain accurately populations, the stocks of gold, the demand owing to the mechanism of financial operations, the standard of living, the difficulties or otherwise of winning gold. We must therefore base our views upon the data from the year 1840 onward when the price index was 1,162, the basic year being 1911 = 1,000. Up to the year 1916 the range of the price indexes was from 726 in 1896 to 1,513 in 1865 and 1,365 in 1916. We may say, therefore, that the range is about 0.75 to 1.50. There is every probability of a readjustment when events again become normal.

Apart from the effect of war, financial collapses, famine, etc., it is of course to be expected that the relationship of commodities to gold should rapidly change with improvements in the mechanism of exchange. The less gold is employed in this mechanism the greater will its depreciation tend to be, because its quantity will be in excess of requirements. There is nothing extraordinary in this, and the phenomenon hardly belongs to the arcana of finance.

8. *Danger of a money unit not representing a reality.* In the new system advocated the money unit becomes, if not a mere *nominis umbra*, at least a unit dissociated from the *reality of value*. A credit instrument, a note, a bond, is really a promise to pay, and is without intrinsic value. For this reason it must be safeguarded in some way, *viz.*, by the holding of at least a considerable proportion of what it represents; for example, gold, etc., in the case of our present money system. It would appear that it is not proposed to hold commodities as the reality against the "dollar-certificates," but gold of ever varying value.

Thus, as previously stated, the new "dollar," or the new "sovereign," will not be a definite quantity of a commodity (gold) of standard fineness, but *an intrinsically valueless thing*, valid for exchange, not into the composite unit which is the corresponding

[5] Means for three years only from an incomplete number of returns.

reality, but into some given amount of gold determined by its price, officially declared upon a basis of experience of the price of the commodities in the composite unit. But since the gold liberated is not likely to be used in the arts, quite a moderate proportion will serve the purpose in view, and as the metal is demonetized, "What," we may ask, "will operate to fix its price?" It will tend to become a commodity, the quantity of which will be greatly in excess over the demand. This *per se* will tend to lower its price as compared with commodities. Professor Fisher's remedy (virtually the demonetization of gold, or at least its elimination from usage as ordinary currency) will accelerate the rapidity of its fall in value: in other words, it will tend to enhance the prices of commodities in relation to gold, though in his scheme the fact is masked by the introduction of an intermediary—the paper dollar—which will appear to be constant. The reality of its depreciation will be evidenced by one thing only, *viz.*, that as time goes on, the paper dollar will buy more and more gold in proportion as the currency usage of gold is diminished. This may of course be corrected by the supply falling off, as it may not be profitable to win gold in such circumstances.

9. *Inflations of currency steadied only by storing commodity of value.* The large issues of paper currency, alleged to be convertible, but really inconvertible (at least temporarily), have already been followed by inflations of price. These inflations will quickly be corrected as soon as the paper becomes really convertible. The possession, by the issuer of paper money, of the commodity (gold) which ensures convertibility is the corrective that operates against the perpetual advance of prices from continued inflation: the necessity of possessing the gold limits the issue of the paper.

The unlimited issue of valueless paper which can be made legal tender, and is not even interest bearing, brings in its train the mischief with which it is uniformly associated. The large issue of paper money has been tried frequently, perhaps the most notable instance being the issue of the French "assignats." The new scheme does not propose that governments issuing the paper should store either the composite unit or gold as a check on overissue, and it is the leaving of this out of sight which lends plausibility to the scheme. The Gresham law will operate and the gold pass out—more and more cheaply—to those peoples who do not espouse the scheme or endorse it practically. *The necessity of storing a reasonable proportion of the thing of value (i.e., gold)*

represented by the paper is the safeguard which the new scheme does not sufficiently take into account.

10. *Gold as a safeguard.* But here perhaps the rejoinder may be made that it *is* proposed to retain gold stocks and to make the paper money convertible. The gold dollar of 25.8 grains of gold, nine tenths fine, will have disappeared. Definite weights of gold will be paid out against paper dollars. Initially the paper dollar will buy a little less than 25.8 grains of gold. As paper issues increase, a paper unit will tend to purchase less and less gold (a result in accord with the quantity theory of money) unless this is modified by a collateral demand for gold and a corresponding restriction of paper money to the minimum of currency requirements. There would, as previously stated, be no necessity to make gold coins: gold masses (bricks) of specified fineness and weight, duly stamped by the mints, would take their place.

It is interesting to note that in this development (?) we should be virtually going back to the days of the Chinese gold cubes, for these gold masses would be exchanged for the dollar certificates in one country and sovereign certificates in another according to their latest declared gold purchasing power.

11. *Gold being excluded in the determination of a price index really remains the standard.* It is true of course that the scheme will tend to stabilize the value of the dollar certificate in ordinary circumstances, *provided* gold be left out of account in the list of commodities embraced in the evaluation of the price index. Of course, were it included with a proper weighting, ***it would balance the price index, since the quantity of gold is made to fall in the same ratio that the price index rises.*** Thus this metal is in a somewhat peculiar position. It is still to be regarded on the one hand as a mere commodity, for variable quantities will be purchasable according to its declared price by means of paper certificates, each of which represents a given composite group of commodities other than gold. Notwithstanding this, the whole system of exchange relations between gold and all other commodities remains unaffected, excepting in so far as demonetization diminishes the quantity of gold required as currency.

Exchange relations between commodities are not changed by the mere adoption of any one or of any group of them as a basis of reference. That this is so can be visualized by a very simple

diagram in which the lines denote the exchange relation of each to M, thus any one commodity (A, B, C, D, etc., or W, X, Y, Z, etc.) could take the place of M in the diagram (say, either 1 bushel of wheat, or a complex group made up in any definite way whatsoever, instead of so many grains of gold), and the scheme of relations would be absolutely unchanged. All that is changed is the mere numbers expressing the relations themselves: the numbers would differ, not the relative facts. So far as the exchange relations are concerned, the new proposal is essentially only a manipulation of figures, not a change of the reality. Parenthetically, it may be remarked here that it will not stabilize the purchasing-power of the dollar in all circumstances, as we shall later see.

12. *The stabilizing function of the composite unit.* If the new scheme does not contain some hidden surprises (which is quite possible) and does not lend itself to injurious financial manipulations (which is also possible), it is of course true that it might serve the purpose of providing a unit of (relatively) constant value in ordinary times for those whose purchasing requirements happen to coincide with it both qualitatively and quantitatively. That is to say, any person whose purchase requirements happen to be the same proportion as regards commodities and their amounts as in the composite unit, would have a paper money unit of approximately fixed value (so long as he did not want to purchase gold). It would therefore automatically, subject to the indicated limitations, adjust payments so that they would have in this particular case a constant purchasing efficiency. The uniform purchasing power in this sense is maintained by varying the relation of the certificate to the real standard, *viz.*, gold. But obviously it is not true that it is uniform for all classes of purchases and purposes. For one set of purchases it would be disadvantageous and for another advantageous. It is only *on the whole* and for the "*average purchaser*" (in the sense of "l'homme moyen") that it is of uniform value. In individual cases it is non-uniform, and for the purchase of gold is as variable as the price index is in the present system.

13. *The application of price indexes to determine equivalent payments similarly stabilizes purchasing power.* What Professor Fisher calls the "unjust transfer of property," the "cheating of savings and bond holders," the "suffering of salaried classes," and also of the wage-earning classes wherever wages are not equated by means of price-indexes, may all be remedied by determining that salaries, etc., and contract payments shall always be

subject to correction by means of the ratio of price indexes at the time of the initial agreement and the time of payment. (In Australia minimum wages are equated from time to time in this way, but not automatically.) As already shown, it does this exactly as the "paper certificate" does, and is effected in a perfectly definite way, which is quite intelligible. The creation of a dollar certificate of varying value as regards the standard metal (gold), of varying value as regards any individual commodity, and of (approximately) fixed value only as regards the purchase of the composite unit or any multiple thereof, has after all nothing like the virtues that it appears to have when we restrict our imagination to purchasers engaged in buying the composite unit or its approximate equivalent. From this point of view alone it is seen that the abandonment of the precious metal (gold) as the standard of value is at least of very doubtful wisdom.

The reason why gold has held its position as a standard of payment from time immemorial is that in respect of physical properties and relative value it is uniquely fitted to serve as a standard, and the question of changing values can be as conveniently and intelligently met by applying price-index ratios as by using a paper dollar of varying gold values. It seems almost to have been overlooked in Professor Fisher's article that gold in currency, and the gold reservoir to meet unanticipated financial situations, constitute together a stabilizer of eminent services; and also that the adoption of a single commodity of high value, great permanence, easily handled, and incorruptible, has been of enormous advantage to mankind.

14. *Conclusion.* In closing his article Professor Fisher says: "Our shifting dollar is responsible for colossal social wrongs. It is the great pick-pocket, robbing first one set of people, and then another, to the tune of billions of dollars a year, confounding business calculations and convulsing trade, stirring up discontent, fanning the flames of class hatred, perverting politics." These evils are to be annihilated by securing "a true standard for contracts, a stabilized dollar."

We have pointed out that the whole system of exchange relations is not really altered by making the "dollar" the name for the value of a composite unit instead of the name of a definite weight of standard gold. So far as it is possible to attain it, the result at which Professor Fisher aims can be secured by making wages, salaries, or any contracts as to payment that we please vary as the price indexes vary. By so doing we see clearly the

mechanism of our operations, and this is not a disadvantage but an advantage. We are not working blindly but intelligently. The *simplicity of the* system of comparing the exchange values of all other things with a unique standard—gold—is not jettisoned but retained. We can decide which payments shall be made subject to price-index variations and which shall not, for they are probably not all equally entitled to this alleviation, or loading, as the case may be; and, further, the scheme cannot and should not be indiscriminately applied.

Finally, there is an error in the assumption that a stabilized money unit is really a possibility, which error can be made manifest by the following considerations. Suppose that on an isolated continent all transactions were carried on by a paper currency guaranteed to be valid by its government, the unit representing the value of a definite composite of commodities. Drought occurs and crops fail, producing a serious shortage of some of these. Obviously the whole system of exchange relations will then have to be changed, and those who have most paper dollars will be prepared to sacrifice them to meet their needs; that is, the commodity value of the paper dollar will have fallen in spite of the stabilizing process. The situation would be the same if the currency were gold. With a paper currency there would also be greater risk of failure to reëstablish a normal situation, because it is intrinsically worthless. We are safer with the system of a noble metal basis, and all difficulties which arise from general changes between the unit of value and commodities can be met by special or general provisions determining the proper payment by means of price indexes. It will be a service of value if we can eliminate from popular opinion the notion that money payments for goods or for services can be mechanically made or adjusted so as to be perpetually satisfactory. Whenever Nature's bounties are variable in quantity or fail, and whenever the population is in excess of supplies, the ordinary dollar will fail and the "stabilized" paper dollar will fail also. No manipulations dependent upon price indexes can serve us, and not even contracts can secure us. The attempt to create a unit of value which shall be constant is really chimerical, and experience would soon reveal that. I am of opinion that if a real crisis came through world shortages, the holders of the paper dollars would have reason to deplore the new system.

In closing I desire, however, to express my sense of indebtedness to Professor Fisher for so ably raising this question. While

I do not think his conclusion is correct, *viz.*, that it is desirable to create a "certificated unit of money," his discussion of the question is illuminating, and brings again into strong relief a point of view argued long ago by Jevons, a point of view which has commended itself to the arbitration courts of Australia in regard to wages at least, but which probably requires considerable qualification. It is of great advantage that, from time to time, our economic usages, however long sanctioned, should be reviewed by capable minds of great originality and clear insight, and that we should be forced to readjust our point of view and see the truth with a wider outlook. I hope later to show explicitly that there is a very real limit which prevents the automatic adjustment of the payments for services (salaries and wages, etc.) so that they shall perpetually have the same commodity-purchasing power; and to show also that no unit of money, metallic or paper, can possess this power, even if it were legally declared that it shall have it. The idea that we can have a stable unit of money leaves out of sight that the bounty of Nature varies, that man's industrial activities do not exactly coincide with human requirements, that the vagaries of taste disturb his wants, and that the standard of his desires perpetually alters. A unit of *value* cannot appropriately be compared—as Professor Fisher compares it—with a physical standard:[6] for on its subjective side, which comes specially into play in all crises (shortage, famine, etc.) the constancy of relation to commodities cannot be assured. In times of famine people would be willing to give two, three, or more stabilized dollars for the group of commodities which each dollar "represented." It is these facts that make the hope of creating a stabilized unit of anything chimerical, and which show that merely mechanical manipulations of prices and values cannot remedy a difficulty which is real and in the nature of things.

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[6] *Op. cit.*, p. 13. In the case of some physical standards (*e.g.*, length, weight, etc.) its nature is that of an example in kind: for instance, the distance between two points, a mass of gold or platinum. In the case of others the unit is measured by some consequence of its presence: *e.g.*, in the case of heat by linear, area or volumetric changes. Exchange-value depends upon the attitude of the mind: that is, ultimately it is esteem-value. Thus in a shortage of food commodities, the esteem-value would rise, and although the certified "stabilized dollar" was to represent given quantities, famine would so raise the esteem-value of food that persons would—in extreme cases—pay any number of "stabilized dollars" to preserve health or even life itself.

REJOINDER BY PROFESSOR FISHER

Dr. Knibbs's criticisms of the plan which has been proposed by myself and many others[1] for stabilizing monetary units are interesting and able, but, for the most part, traverse ground which has already been covered.[2]

His chief criticism seems to be that we can correct the aberrations of our gold standard by special clauses in contracts providing for adjustment by means of an index number and that this extraneous adjustment would obviate the need of any change in our monetary system.

To prove that an adjustment by means of an index number is feasible Dr. Knibbs cites the fact that such adjustments have been made in Australia in relation to wages. I hasten to say that, in the absence of stabilization, I am ready to go quite as far as Dr. Knibbs in favoring such wage adjustments.

Australia is not alone in adopting this principle. A noteworthy result of the recent war is the increased interest in this country also in the measurement of price levels by means of index numbers and the practical utilization of these index numbers in making equitable adjustments in the payment of wages. Strikes have occasionally been settled by wage increases proportionate to the increased cost of living. In Oregon and Washington the minimum wage was revised on the same basis. The War Labor Board and the Shipping Board have in many instances used index numbers in determining wage scales. In some cases, these boards arranged for periodic readjustments. Several firms have provided high cost of living pay envelopes, supplementing the base wages by a percentage varying with the index number. These firms have not only safeguarded themselves against labor discontent in the present while prices are high but have made the way easier for future wage decreases if prices fall. The Bankers Trust Company in

[1] It should be emphasized that practically the same plan had been worked out independently by several besides myself. This was done in considerable detail by Aneurin Williams, M.P., Professor (now Dean) J. Allen Smith of the University of Washington, D. J. Tinnes of Hunter, N. D., and Henry Heaton of Atlantic, Iowa; and in a general way by Simon Newcomb, Alfred Russell Wallace, Professor Alfred Marshall, William C. Foster of Watertown, Mass., and others.

[2] See "Objections to a Compensated Dollar Answered," American Economic Review, vol. IV, no. 4 (Dec., 1914).

New York went to immense trouble and expense to calculate the changes in the cost of living to its clerks, appointing a special investigating committee which drew up a report of twenty-two pages.

But Dr. Knibbs, after discussing the feasibility of such special extraneous adjustments, goes on to say that, after all, such adjustments are not necessary.

Now, if such adjustments are not called for, why, it may be asked, have they been made in Australia, the United States, and other countries? To my mind there lies a world of significance in the fact that index numbers are being used to correct the aberrations of units of purchasing power. No possible explanation for so wide an adoption of this corrective, in spite of its clumsiness, has been or, I venture to believe, can be made except that the purchasing power of the dollar, the shilling, etc., acutely needs such correction!

But Dr. Knibbs maintains that gold is already sufficiently stabilized by the fact that there exists a large reservoir of it. In support of this supposed stability he gives no evidence whatever, but relies entirely on a priori assumption.

The simple fact is that gold, and our currency in general, is *not* stable! Actual statistical tests of the value of the dollar in terms of commodities in general, as shown by the index number, prove that even before the war gold was only about as stable as eggs and not as stable as carpets!

Thus we find Dr. Knibbs asserting that our currency does not need stabilization after admitting that an extraneous adjustment may be desirable and is practicable. Would it not be more logical if he had cited the Australian experience, which he used in support of an extraneous adjustment, to prove that we *do* need stabilization?

Moreover, an extraneous adjustment is *not* practicable as compared with the plan which Dr. Knibbs opposes. He says "*Exactly* the same result will be achieved [by index number adjustments in contracts] as will eventuate by Professor Fisher's scheme [for incorporating the index number in the monetary unit itself]." While, theoretically, it is possible by means of index numbers to adjust wage contracts, loan contracts, etc., yet from a practical point of view it presents extraordinary difficulties. *Theoretically* we might have an elastic yardstick, say the height of a barometer, changing from day to day. All that would be necessary for the

salesman selling cloth would be to have the weather bureau supply him daily with a simple multiplier, such as .823 on one day and .798 the next, by which, after measuring out his cloth on the barometer, he should make the needed adjustment! It is only a matter of arithmetic and to adapt Dr. Knibbs's words, "*exactly* the same result will be achieved"!

Practically, of course, one might almost as well expect an individual Englishman to adopt a decimal system and transact his business in dollars and cents while everyone else is talking in terms of pounds, shillings, and pence as to depend on an arithmetical factor for correcting either yards or dollars. Daylight saving was brought about by a shift of the clock applying to the whole country, although *theoretically* all that was necessary was for each individual to get up an hour earlier and make his day's program on that basis! Practically, Dr. Knibbs could not hope to see an extraneous method in general use for years and, until it is in general use, special inconveniences will be suffered by any firms which employ it.

A number of practical difficulties with such extraneous corrections are given in my *Purchasing Power of Money*.[3] They involve the annoyance of special contracts and special calculations. If one side of the ledger is stabilized and not the other, the profits are really destabilized.

It is clear that such a plan can be only a makeshift for extreme cases and can never be made universal. We must seek some more convenient method of applying the correction, one which will dispense with the need for each individual to make calculations. This is accomplished in the plan of stabilizing the dollar; for it incorporates, as it were, the index number in the monetary unit itself.

It is surprising to find Dr. Knibbs here also reversing the true argument. He complains of the plan to stabilize the dollar because of the trouble it would make to the "cambist"! Why did he not cite the fact, a million times as important, that the use of index numbers as an extraneous corrective to contracts would involve troublesome calculations, not to a negligible fraction of mankind but almost universally? The cambist is not only an infinitesimal fraction of one per cent of the population but a professional calculator; and as his work involves varying factors in any case, the introduction of a new variation would be of little trouble to

[3] Chapter XIII, § 4.

him even if his troubles were a matter of national concern. Moreover, the system would not even introduce such cambist calculations, if adopted internationally.

Dr. Knibbs again uses a double-edged argument when he finds fault with the proposed system for stabilizing the dollar because it would not meet the needs of varying classes which properly require different kinds of index numbers of different "weighting." Why does he complain of the stabilization plan on the ground that it does not work out its corrections to a sufficiently fine point, if his claim is true that instability of the gold standard is so trifling as not to need any correction at all!

Here again Dr. Knibbs gives no evidence as to his contention that different index numbers would seriously be needed for different classes. The truth is that actual facts contradict such an assertion as flatly as they contradict the assertion that no index number is needed at all and as flatly as the two assertions contradict each other. One of the striking points about index numbers is that usually they move in general sympathy, whatever the system of weighing, whatever the number of commodities, whatever the list of commodities, whatever the classes of the community to which they especially apply. And the divergences which we find under our present system of a variable dollar would be even less if the dollar were stabilized. For instance, retail prices now lag behind wholesale prices simply because wholesale prices are allowed to move so fast. Whenever the price level remains even approximately unchanged the large discrepancies between the movements of wholesale and retail prices disappear. If the level of wholesale prices were not allowed to move at all, the level of retail prices would also be stable.

Dr. Knibbs's second criticism deals with the question of securing greater justice. Dr. Knibbs takes exception to my use of the words "cheated" and "rob" as applied to the pranks played upon debtors and creditors by our present standard, or lack of standard, and gravely points out that when a contract is made it must be kept! I have often expressly stated that, under our present system, an individual harmed by the appreciation or depreciation of money has no grievance against some other individual. The problem is not one of *individual* justice but of *social* justice. The concept of *social* justice, as distinct from *individual* justice, is becoming year by year more distinct and important. For instance, the time has gone by when we coldly tell the workman who is in-

jured on a railway that he submitted himself to such a risk when he took employment and therefore has no grievance against anybody. Instead we provide some sort of social insurance. It is quite true that, under our present system, every user of money is a speculator in the value of gold and must take the consequences; and, as long as society has its present system, the individual is bound by its rules. It is not the behavior of the individual but the system itself which should be changed.

Dr. Knibbs says, "Why should we not apply the same principle to any commodity besides gold, say to wheat, cotton, iron, copper, frozen meat, etc., and indemnify the loser from a change in price?" The present system by which the meat dealer takes the risk of the price of meat, the wheat dealer that of the price of wheat, etc., puts the risk, which must be borne somewhere, where it can be borne best, in the hands of professionals.

If, however, meat were made the *standard of value*, all of us would become speculators in meat *without* the means which are open to the meat merchant of knowing what the changes of value from time to time are likely to be. The objection to our present system is not that a few specialists in gold have to suffer loss but that gold is made a yardstick for all contracts.

Dr. Knibbs's remaining criticisms can be dealt with more briefly. In one respect he has misunderstood the plan. He seems to think that it is equivalent to almost the complete demonetization of gold and that the value of gold (when discarded as money) would be reduced on that account. Incidentally I may point out that whether its value would be reduced or not the system of stabilization would operate to keep the value of a *dollar* stable. But as a matter of fact gold value would not be substantially affected. It must be remembered that today almost universally the monetary use of gold is only that of reserve, precisely what it would be under the proposed scheme.

In the same connection Dr. Knibbs seems to think that there is some hitch in regard to the connection between the paper certificates and the gold reserve. He says:

> The new scheme does not propose that governments issuing the paper should store either the composite unit or gold as a check on over-issue, and it is the leaving of this out of sight which lends plausibility to the scheme. . . . *The necessity of storing a reasonable proportion of the thing of value, that is gold, represented by the paper, is a safeguard which the new scheme does not sufficiently take into account.*

Dr. Knibbs is mistaken. It most certainly *is* proposed to retain "gold stock" and to make the paper money convertible. The processes by which gold adds to or subtracts from the currency will be substantially the same as at present. The only essential change is that the price of gold given by the government to the miner and importer and asked of the jeweller and exporter will no longer be the arbitrarily fixed $20.67 an ounce but will vary according to what gold is really worth as shown by means of the index number from time to time. Redemption would, of course, occur just as at present and provision would be made for the reserve to keep the due ratio to the certificates outstanding. In my forthcoming book on *Stabilizing the Dollar* this point is elaborated in a special appendix on The Gold Reserve.

Dr. Knibbs conjures up hypothetical cases such as universal world famine, world drought, world shortages, under which circumstances he prophesies that the plan would do more harm than good.

Here again Dr. Knibbs reverses the true argument. Why should he cite the almost infinitely improbable case of a world scarcity or superabundance of things in general and pay no heed to the extremely probable, in fact often realized, case of scarcity or superabundance of gold in particular? Instead of supposing improbable simultaneous shortage throughout the world of a hundred commodities why not suppose that the alluvial gold at the mouth of the Sacramento River should prove to be recoverable at a profit and should prove to amount to many billions of gold, both of which propositions have been reported to be true?

The only time when we have had something approaching a world scarcity has been during this recent war and yet it has been just at this time that we have, in wage payments, adopted the corrective for monetary units which Dr. Knibbs himself mentions with approval. If these high war prices represented not superabundance of money but simply scarcity of goods it might well be argued that no such correction was called for.

I make bold to say that if so able a critic as Dr. Knibbs can not find more serious defects in the plan than he shows in his article we may rest assured that the plan will survive the attacks upon it. Dr. Knibbs himself admits the main point when he says: "It is true, of course, that the scheme will tend to stabilize the value of the dollar certificate in ordinary circumstances." He simply denies the need.

It is no reflection on Dr. Knibbs to say that, while he may be quite unconscious of the fact, in my opinion his objections, like those of the great mass of objectors, are emotional, not intellectual. He would defend the existing system against an unwelcome attack. He fears to see it changed. "We are safer with a system of a noble metal basis," he says. In the bottom of his mind, I venture to infer, there is just one objection to the new system and that is that it is new.

Now that we have and are actually using the index number as a corrective of our monetary units, they stand convicted and will become increasingly discredited until in some way the needed correction is applied more generally. Possibly some better way out than that which I have suggested may be found. The substitute mentioned by Dr. Knibbs of an extraneous correction can and will be applied sporadically and so will serve a good purpose as a stepping stone to something more general. That some day such a means of releasing us from the present instability of monetary standards will be desired and attained seems to me manifest destiny.

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AN AMERICAN STANDARD OF VALUE

THE MARKET GAGE DOLLAR

The Market Gage plan, which has been presented in this REVIEW,[1] assumes:

That, in purchasing power, all money and credits used as media of exchange vary directly with changes in the gold weight of the dollar of redemption for which they, in effect, are demand due-bills; and that the general price level varies *inversely* with the purchasing power of such money and credits. The term credits as here used covers all credits used as media of exchange, including book entries and all written and oral and even tacit agreements to pay in money or in goods priced in money.

That, therefore, to increase the gold weight of the dollar will increase the purchasing power of all media of exchange reckoned in dollars and thereby lower the price level; and to lessen the gold in the dollar will lower their purchasing power and raise the price level.

That the per cent of change in the general price level may be found each day by comparing the day's wholesale prices of all commodities with those of the preceding day.

That, these assumptions being sound, price level stability may be maintained by correcting each aberration as it appears, thus preventing cumulative change.

Its author cannot agree with Professor Irving Fisher that in the construction of the index number a selected list should be used "which should exclude the sluggish commodities in order to be more promptly responsive to price changes." In using such a partial list and excluding from it the "sluggish and price-fixed commodities," and basing his proposed index number on the active and flighty commodity prices, Professor Fisher would be cutting loose from the true all-commodity value level. This would allow his price level to be dragged downward by the pull of those commodities which by discoveries or by cheapened production are being permanently lowered in price, or to be pushed upward by commodities permanently enhanced in price by scarcity. And, his index number not being a gage of the all-commodity price level, he would have no means of knowing how far he would have departed from his original level. As the dollar must be a true measure of value for all things, all things must enter into its schedule.

The first draft of this plan called for weekly regulation of the redemption rate. The reason for the prompt shift to daily ad-

[1] AMERICAN ECONOMIC REVIEW, vol. 8 (Sept., 1918), p. 579.

justments was the obvious one, that, otherwise, the dollar would be off center most of the time and correction when it came would often cause a jolt. All objections to adjusting but once a week apply with greater force to monthly or quarterly regulation. Infrequent adjustments would impair the worth of the new dollar for statistical uses and as a standard of deferred payments. Any change in the weight of the bullion dollar should, except for a slight lag for which compensation is here provided, produce a reciprocal result, but such a result is by no means necessary to the full success of the plan. To the extent that it fails to fully correct the price level aberration, that aberration, unless in the meantime offset by a contrary market trend, appears in the Market Gage for the following day and causes further adjustment. (See Market Gage schedule on page 265.)

Things salable but not properly quotable on the market are not, as such, included in our schedule. Of these, labor and professional and personal services have hitherto, roughly speaking, risen and fallen with general prices and they should be generally steadied by a steady market level, though rising individually with increase of efficiency and rising as a whole as production, in proportion to a given expenditure of human effort, increases. A steady commodity market will steady wages by supplying simpler data for deciding what is just and right between employer and employee. But the wage level should not be tied fast to the commodity price level, for this would bar the worker from participation in the benefits of cheapened costs of production. The writer has elsewhere worked out a Wage Mean schedule in which wages in the various occupations are listed as commodities are in this schedule. Fluctuations of the Wage Mean signal changes in the national average of wages while fluctuations in the Occupation Index column (corresponding to PQ) show relative wage changes.

J. S. Mill taught that no standard can measure the value "of the same thing at different *times* and *places*." Comparisons of commodity price averages have given us since his time a means of comparing the value "of the same thing at different *times*," in the same market; but no standard that will correctly gage the value of the same thing in different *places*, even at the same time, is yet in sight. Has gold itself ever been, at any one time, of the same all-commodity purchasing power in all countries? Gold, through its proxies, will still be the common vehicle of value. Will occasional change in the weight of gold given a certain name equalize

the exchange value of gold the world over? An international index number with a money unit based thereon would "correct" the net average of price level aberrations the world over, yet its unit would be truly stable nowhere. With so unwieldy a schedule daily regulation would be impossible, yet how else than by daily adjustments of the unit could price level changes due, say, to temporary local credit inflations or contractions, be corrected? Neighboring countries with common free markets may have a common standard, but in widely separate markets the same value can seldom be indicated by the same weight of gold.

International agreement to stabilize separately the various money units is desirable but by no means indispensable. The adoption of an American standard of value would be of immediate benefit and should soon lead to stabilization in other countries.

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MARKET GAGE SCHEDULE[1]

Dollar = 1.6718 grams-d'or (25.8 grains gold)

No.	T	W			Q	P	PQ	PQW
1	80	.002	Gold	U.S. Mint/gram	1.6718	.598	1.	.002
2	400	.010	Copper	Ingot/NY/cwt.	.0400	25.00	1.	.010
3	1,000	.025	Iron-stl.	I.bar/Pbg/ton	.0500	20.00	1.	.025
4	760	.019	Coal	Bitu/Cinc/ton	.3125	3.20	1.	.019
5	800	.020	Corn	No.3/Chi/cwt.	.9091	1.10	1.	.020
6	1,600	.040	Wheat	1 Nor/Mps/cwt.	.4000	2.50	1.	.040
7	1,400	.035	Cotton	Middlg/NO/cwt.	.0625	16.00	1.	.035
8	1,600	.040	Sugar	Granul/NY/cwt.	.1300	7.69	1.	.040
9	1,200	.030	Cattle	Steers/Chi/cwt.	.1000	10.00	1.	.030
	(31,160	.779	All other commodities	....				.779)
	40,000	1.00	Market Gage at opening, first day	....				1.00

[1] All goods on the wholesale market must be listed, the major items separately, the minor items in groups. A few series are here shown; all others being lumped together in one line to make up the 40 billions (assumed) annual trade.

DAILY ADJUSTMENTS[1]

Close of first day				Second day		Third day		Fourth day	
No.	QW	P	PQW	P	PQW	P	PQW	P	PQW
1	.003344	.598	.0020	.598	.0020	.598	.0020	.598	.0020
2	.00040	24.75	.0099	24.75	.0099	24.50	.0098	24.75	.0099
3	.00125	20.00	.0250	19.60	.0245	19.60	.0245	20.00	.0250
4	.00594	3.00	.0178	3.00	.0178	3.00	.0178	3.00	.0178
5	.01818	1.20	.0218	1.20	.0218	1.21	.0220	1.20	.0218
6	.01600	2.70	.0432	2.60	.0416	2.62	.0419	2.60	.0416
7	.00219	16.00	.0350	16.00	.0350	15.80	.0346	15.80	.0346
8	.00520	7.75	.0403	7.69	.0400	7.60	.0395	7.75	.0403
9	.00300	9.50	.0285	9.40	.0282	9.40	.0282	9.50	.0285
	(All others....		.7768		.7791		.7795		.7787)
	Market Gage..		1.0003		.9999		.9998*		1.0002
	Grams-d'or		1.6723		1.6721		1.6717		1.6720

[1] The redemption rate (the dollar equivalent in grams-d'or) multiplied by the M.G. for the day gives the rate for the following day. The M.G. for a certain day (*) having shown the same price trend as that for the preceding day, a trial allowance for lag—in this case 10 per cent of the day's aberration—is made in figuring the new rate.

EXPLANATION BY COLUMNS

T— Trade. The total volume—in millions of dollars—of the annual wholesale trade in each commodity.

W— Weighting. The relative market importance of each stated in decimals.

Q— Quantity. The initial commodity equivalent of the dollar, in decimals of the unit named.

P— Price. Current market price of quantity named.

PQ— P times Q, the commodity index, which at the beginning is 1 in each line. Net change in price of each commodity since the construction of the schedule may be shown daily by this index.

PQW— M.G. component, PQ times W. The footing of this column is the Market Gage.

QW— Q times W, the initial dollar equivalent, weighted, carried forward daily to facilitate figuring. QW times P = PQW.

The entire schedule should be revised yearly or as often as the necessary trade data for column T can be obtained.

After the average daily lag in market level adjustment shall have been determined, a compensatory allowance for such lag should be made whenever a market trend shall persist for two or more consecutive days.

AGRICULTURE IN EARLY LATIUM

The Roman Compagna, today the most desolate plain of Italy, once nourished the masses that subdued Italy and through Italy the Mediterranean basin. Livy has left us only fragments of oral traditions, already centuries old in his day, to explain how that narrow region could beget such overwhelming power. That the tradition known to Livy truly represented the essential conditions we are now learning from every science that can be brought to elucidate the prehistoric problems. The geologists have finally succeeded after a century of indefatigable work in charting the processes that shaped the Latin plain, the archaeologists can now with a fair degree of satisfaction sketch the history of the peoples who took possession when the volcanoes subsided enough to permit men to dwell in Latium, and the new agricultural experimental stations are analyzing and demonstrating the peculiar properties of its soil. All are providing scraps of knowledge that will enrich the footnotes of future editions of Livy's first book.

The Latin plain in its present conformity is very recent, so recent that the last masses of volcanic ash probably post-date the pyramids of Egypt. The process of formation continued from long before the glacial periods and all through them.[1] More than fifty craters, from which the ash and lava poured, can still be found within twenty-five miles of the imperial city. Long periods of tranquility intervened when jungles grew up over the temporary surface, only to be buried under a new mass of ashes. The deep cuttings of the railways that run out of the eastern gates of Rome expose repeated layers of black and yellow soil lying between thick strata of tufa and ash; they mark the jungles of former intervals of rest. The present surface is not old. The present mouth of the Tiber has apparently silted in as much alluvium since Ostia lay upon the seashore in Sulla's day as the river carried down between the last great eruptions and Ostia's foundation. Though the Sabine hills immediately behind this plain show numerous sites[2] of habitation several millennia old—some being the homes of savages of the palaeolithic age—and though there are traces throughout the peninsula of the earliest Indo-European peoples of the terramara[3] civilization (the men who in the third millennium introduced

[1] A. Verri, *Origine e Trasformazioni della Campagna di Roma* (1911).

[2] G. Pinza, Monumenti Antichi, vol. XV. This volume covers the whole of modern Lazio, which is more than twice the area of primitive Latium.

[3] Peet, *The Stone and Bronze Ages in Italy.*

the use of copper), the oldest graves of the Forum, the Palatine, and of Grottaferrata cannot with certainty be placed earlier than the iron age, perhaps not more than a thousand years before Cicero. Archaeologists have doubted the accuracy of the reports[4] published by the excavators who a century ago claimed that the burial urns uncovered below Castel Gandolfo were found under undisturbed layers of volcanic ash, but Pinza has called attention to the traditions of the Romans that in the early days of Rome ashes frequently fell upon the Alban Hills, and his own theory that Alba Longa was buried in the debris of an Alban eruption does not entirely lack plausibility.

The Latin plain is then of very recent date, and human cultivation of it of still more recent. It is well known that the volcanic ash that falls from Vesuvius is rich in phosphates and potash and that a moderate admixture of it in the soil acts as an excellent fertilizer. In fact, the Campanian farmer is not averse to an occasional eruption if only the volcano behaves with moderation. The later ash-strata of the Alban volcanoes had an abundance of these same constituents, though a large percentage of the original elements has leached out with time. Needless to say, however, the ash alone did not lend itself to cultivation at once, since grain needs an abundance of nitrogenous matter, and a solider soil than the ash at first provided. Before men could inhabit the plain we must posit a long enough period of wild growth, the invasion of jungle plants and forests which could create a sufficiently thick humus for agricultural purposes. Such forests did invade the plain. Not only do all the authors preserve the traditions of forests and sacred groves that are mentioned in the tales of the early kings, but Theophrastus[5] still knew of Latium as a source of timber as late as the third century: "The land of the Latins is well watered, and the plains bear the laurel and myrtle and remarkable beech trees. Trunks are found that singly suffice for the keel beams of the great Tyrrhenian ships. Fir and pine grow upon the hills. The Circaean promontory is thickly overgrown with oaks, laurels, and myrtle." It is interesting to find that the beech then grew in the Latin plains, for now that the Campagna is parched and treeless it has withdrawn to the hills, if not to the mountains.

[4] *Bull. dell. Inst.*, 1871, p. 34.

[5] Theophrastus, *Hist. Plant.*, V, 8, 3. *Cf.* Pais, *Storia Critica di Roma*, vol. I, p. 627.

With this growth of timber from a subsoil which had many excellent qualities, a very rich soil was being formed for farming when once the Alban volcanoes should cease pouring out the flames that kept the hill peoples back in fear. There can be little doubt that the region was far from being semi-arid then as it is now. Today the grass parches brown in June, not to revive again till near October, and the wheat is hurried to a premature harvest in the middle of June. But Varro sets July down as the month of harvest in his day and summer rains are frequently mentioned in the classical authors. It would be hazardous to assume a theory of "climatic pulses" by way of explanation of this difference, and it is doubtful whether a mere two thousand years in the long recession of the glacial period could cause a perceptible change in temperature. The explanation of the change is no doubt to be found in the almost complete deforestation of Latium and the mountains behind. There can be little doubt that when the Sabine ridge from Praeneste to Monte Gennaro and the whole Volscian range were a thick forest instead of the parched white rocks that now stand out, the cool mountains caused condensations and precipitation over the plain when struck by the humid sirocco. Not only that, but the areas of forests still standing on the mountain sides and plains retained the water long and afforded a lasting subsoil supply and an abundance of nightly dewfalls which do not now exist when the last rains of spring leap off the bare rocks and flow away at once in torrents to reach the sea.

When therefore the early settlers pushed down into the Campagna and burned out "clearings" for farming (indeed the Terramara folk had then practiced systematic agriculture in the Po valley for many centuries), they found a soil remarkably rich, though not yet very deep, and the warmth and humidity that make the harvest heavy. The population in time grew dense, as would be expected from such conditions. There is nothing improbable in the tradition of the fifty villages that Pliny has preserved. The treasures now being gathered into the museum of the Villa Giulia from the ruins of sixth century Ardea, Satricum, Lanuvium, Gabii, Praeneste, Nemi, Velletri, Norba, and Signia, speak of an era of prosperity that no one dared imagine a few years ago. The ancient lords of these cities, which became malarial wastes before Cicero's day, decked themselves and their homes in the gold and precious stones of all the lands from the Baltic Sea to the Mesopotamian valley. Yet the wealth which made possible all this dis-

play did not spring from Latin industry or from commerce directed by Latins, if we may trust the evidence of archaeology now available. It was the produce of a rich soil cultivated with unusual intensity which paid for it, and kept alive a thick population such as would probably compare with the swarming tenancies of the Po Valley today.

There are numerous relics from that remarkable agricultural period still to be found in Latium, traces of drains, tunnels, and dams that are all too little known. The modern Italian farmer who hardly finds his land worth the merest labor of planting and harvesting fails to see how in a former day the owners could have secured returns for such enormous expenditure of labor, and, when asked to suggest an explanation for these ancient works, resorts to fantastic theories of mining and siege works. A convenient place to study the intricate draining system of that time is the district below Velletri. Here as De La Blanchère[6] discovered some forty years ago the ground is honeycombed with an elaborate system of tunnels running down the slopes of the hills toward the Pontine marshes, *cuniculi* as he calls them, about 3 by 1½ feet, cut in the tufa a few feet below the surface and usually along the sides of the numerous ravines. The system involved hundreds of miles of excavating. De La Blanchère was unfortunately misled by the then prevailing "miasmatic" theory of malaria into believing that these tunnels were cut to drain the soil of pest waters. But they occur only on the slopes where the land drains all too readily without aid; they do not touch the stagnant Pontine marshes below. However, he also suggested as a possible theory what seems indeed to be the true explanation. They were apparently cut at a time of such overpopulation that every foot of arable ground must be saved for cultivation. By diverting the rain waters from the eroding mountain gullies into underground channels the farmers not only checked a large part of the ordinary surface erosion of the hillside farms but also saved the space usually sacrificed to the torrent-bed. I know of no other place where labor has been so lavishly expended to preserve the arable soil from erosion. The ground must have been precious indeed, and the population in sore need to justify such heroic measures for the insurance of the annual harvest. Similar systems are found in the valleys north of Veii and were probably built under

[6] De La Blanchère, *Un chapitre d'histoire Pontine,* in *Mél. d'archéol. et d'hist.* (1882).

similar conditions. Indeed, the remarkable cutting 75 yards long at Ponte Sodo[7] near the citadel rock of Veii through which the Fosso di Formello has ever since flowed seems to have been undertaken to save a few acres of the circling river bed for cultivation. Similarly the emissarium of the Alban lake, 1,300 yards long and 7 to 10 feet high, was cut through solid rock to save a few hundred acres of arable soil on the sloping edge within the crater. Even with the tools of modern engineers, that task would not now be considered a paying investment. Finally let the student of intensive tillage take a morning walk from Marcellina up Monte Gennaro through the steep ravine of *Scarpellata.* It is usually dry, but after a heavy rain the water pours down in torrents, carrying off what little soil may tend to accumulate. To save small alluvial patches in the course of this ravine the ancient farmers built elaborate dams of finely trimmed polygonal masonry that still withstand the torrents. The masonry is largely made of huge blocks weighing half a ton each and is in no wise inferior to the magnificent "cyclopean" masonry of Segni's town walls. And yet each of these dams could hardly save more than half an acre of arable soil.

It is impossible after surveying such elaborate undertakings to avoid the conclusion that Latium in the sixth century was cultivated with an intensity that has seldom been equalled anywhere. When, furthermore, we consider that the tools of that period were the spade and mattock, we may be sure that each man's allotment was very small, doubtless no more than the two jugera that Varro assures us sufficed for the support of the ancient Latin family. It follows that Latium supported a very densely settled population. With these facts in view the historian can understand whence came the armies that overran the limits of Latium and overwhelmed all obstruction when once they were set in motion, why Veii fell, why the burning of Rome was so quickly repaired, and why Campania called all the way to Rome for aid when threat-

[7] Since Roman Veii stood near this Ponte Sodo (Solidum), it is probably this tunnel that later tradition assigned to the sappers and miners of Camillus' army. The stories of mining operations at the siege of Veii may account for the strange tales that connected the emissarium of Lake Albanus with the Veian siege (Livy, V, 15). The Romans do not mention the tunnel that drains Lake Nemi, though it is twice as long as the Alban one. It must have been cut before the temple of Diana became very important. The Valle Ariceiana and the crater lake on the via Praenestina were also drained at an early date.

ened by the Samnites. It is very probable that when the soil began to show signs of exhaustion under this severe strain, an inadequacy to feed the population which is proved by the desperate methods mentioned above, the growing generations found it necessary to find more room, and that the expansion of the Latin tribe dates from this condition.

The elaborate engineering feats just mentioned are also interesting in providing further data regarding the social groupings of the people of that day. We have generally supposed that the early Latins built their homes together in village groups as the Indo-Europeans so generally did, as the more backward Italic peoples still did in Strabo's day, and as in fact Pliny implies in his tradition of the fifty Latin villages. There is indeed nothing to contradict this view, but we cannot well continue to posit a thoroughly democratic system of communities governed by commons of equal rights and well distributed land-ownership throughout, such as is found, for instance, in so many districts of France today. Small owners could never command the labor and resources required to build the dams found above Marcellina. And the extensive drainage shafts below Velletri, each of which pierced beneath hundreds of individual plots, could not be the work of small holders, nor is it likely that the political organizations of primitive democratic communities were capable of the initiative and sustained efforts that these imply. It is highly probable that such works of enterprise were undertaken by landlords who owned extensive tracts and could command and direct the labor of numerous tenants. It was no doubt such wealthy landlords that lived in the palaces of the hill towns, remains of whose gold ornaments and decorated plate have in some small measure been preserved here and there in unrifled graves. And it was probably a residue of such lords that directed the revolt against the usurping Etruscan princes in the sixth century and founded the Latin aristocratic republic with its powerful patrician senate.

We have remarked that the very intensity of the effort to reclaim small bits of eroding land was a proof of overpopulation and of a dangerous drain upon the productive qualities of the soil. The danger of soil exhaustion was peculiarly great in Latium for several reasons. As noticed above, the soil of Latium had not had a long time for accumulation. Along the extensive ridges of lava that radiate from the Alban hills toward the Anio, along the Appian way, and down toward Ardea, the surface was so hard

that soil-making was well nigh impossible. In such places the plow cannot now be driven. A mere scratch in the thin turf exposes the rock. In other places the conditions were more favorable since the ash and tufa are fairly productive for plants of powerful roots when covered with a humus of proper physical consistency and containing some nitrogenous matter. The surface was, however, new and therefore thin everywhere except in alluvial valleys. To add to the danger, the ash had fallen unevenly in knolls that time has not yet shaped down into a peneplane. In consequence the Campagna presents to the abrading rains of winter a very uneven surface, and when the Latin settlers had once stripped the turf and forest from that surface, the thin soil was in danger of washing away. It is not surprising that the Latin farmer found it necessary to entice the thieving rainwater into underground channels with the utmost speed. The surface loam was very precious and must be saved. With all their efforts, however, the exhausting harvests and the continual erosion did its work, and Latin agriculture was doomed, and with it the thick adornment of prosperous Latin villages. The situation could well be illustrated by the history of agriculture in the "white sand" districts of central Pennsylvania, where the traveller today passes through large areas of country almost uninhabited though well studded with barns and farmhouses now abandoned and falling into ruin. Here the settlers of two centuries ago found a rich but thin alluvial soil lying over a subsoil of sand. A century of reckless tilling gained great wealth out of the soil, but when that was exploited the land was of little value and the farmers left it. The situation in Latium never grew equally desperate, nor will it, since the subsoil there, even though slow to yield its wealth to the feeble roots of mere annual vegetation, is nevertheless comparatively rich. Yet, to judge from the constant cries of distress reported by the early books of Livy, the fifth and fourth centuries before our era were years of increasing exhaustion. To add to the desperate situation, the extensive forests which had insured rainfall well into the summer and had helped husband the moisture in the dry season were ever giving way to the axe. The pressing demand for land resulted in the clearing out of every tract that could be made arable; the abundant population laid large demands upon the forests for lumber; and commerce, as we have seen, carried Latin timber as far as Greece, now well stripped of trees. The deforestation of the Volscian mountains on the south of the Campagna re-

sulted in ruin of that whole region, for the rains washed the mountain sides clear of soil, carried down the detritus into the flat plain below, choked up the course of the streams and turned what was once the garden spot of several large cities into malarial marshes, a pest not only to its own dwindling population but also to villages as far north as Satricum and Asturae. Norba, Cora, Setia, and Privernum dwindled down to unimportant hamlets. The same process of deforestation of the Sabine hills turned these also into bare rocks. Precipitation decreased, the dry seasons grew in length, the rain that fell found its quick course to the sea and Latium became gradually the semi-arid plain that it is today.

While this change was in process the farmers naturally sought for remedies. There was scarcity of manure because during the very intensive tillage when every acre was in use it had not been profitable to keep cattle since beef was rarely served as food, and horses were not in general use. When, however, many farmers found the loam too thin for further cultivation they had no choice but to seed their fields into pasture land, since a turf could at least protect whatever loam remained. A few oxen were needed as draft animals, and the wealthy lords of the city provided some market for the meat. Sheep were also in demand for wool, though this had generally come by barter from the mountain pastures that were fit only for sheep raising. Goats might be raised for milk and cheese.

The chief difficulty for the shepherd and herdsman was the lack of grass in August and September, which necessitated the laborious work of cutting leaves from trees. However, in the fourth and third centuries, when the neighboring mountain pastures of the Volscian and the Sabine hills fell within the political sphere of Rome, a profitable combination of summer and winter pastures became possible. Whether it was the Latin landlord who sought to tide over the arid summer by resorting to the mountain pastures in the dry season, or whether it was, as in the middle of the last century, the Sabine flock-owners who discovered green and warm winter pasturage for their flocks in the abandoned farms of the Campagna, we do not now know. But when once the discovery was made the Latin landlords were quick to seize the opportunity or to find a now profitable use for land that would no longer yield a reasonable harvest of grain. The earliest record we have of Roman slaves in great numbers shepherding on the mountains near Rome dates from the Second Punic war[8]

[8] Livy 32, 26.

but since such notices are incidental and rare we need not assume that the custom was then of recent date. He who has had the misfortune of trying to make his way in a Ford from Tivoli to Rome against the endless procession of sheep going mountainward during the first week of July knows well what Horace[9] meant when he wrote:

Jam pastor umbras cum grege languide quaerit.

This change, however, had serious consequences. Profitable sheep and cattle raising required capital, if indeed pastures were to be provided in two regions; and obviously, since the shepherding of a hundred sheep required little more labor than the care of half a dozen, the poor farmer with his small plot fell quite behind in the competition. Thus the small farmers gradually yielded ground to the master who could command the capital of large-scale ranching; and a general "enclosure" movement began at the expense of the grain fields. Again, since little skill was required, slaves were bought to care for the herds, and henceforth an area of a thousand acres, which in the days of profitable tillage had supported a hundred peasant families now fell to the charge of a few foreign slaves living at random. The depopulation of the Campagna proceeded apace.

Another industry presently hurried the process of crowding agriculture out of the Alban region. Here the abrasion of the soil had been most rapid because the slopes were steeper, but it was discovered that while the weak roots of annual plants like wheat and barley could no longer cope with the soil, grape vines and olive trees could readily nourish themselves even in the tufa and ash that remained. All that is necessary is to hack out and crush the tufa, plant the roots deep with a handful of loam for the plant to feed upon when young. When the plant grows strong it finds its own nourishment where grain fails in the struggle. From that time to this the vineyards and olive groves have never disappeared from the hills and valleys about the Alban lake. Obviously this industry also was developed by the men of wealth who could afford to wait five years for the first vintage and twenty years for the first returns of their investment in the olive groves.

It is customary to say that when Rome gained possession of Sicily in the first Punic war and thus inherited from Carthage the grain tithes of that island she destroyed agriculture in Latium by flooding the market of the Latin farmer with cheap grain. But

[9] *Carmen*, III, 29, 20; *cf.* Varro, *R. R.*, II, 1, 16, Pliny, *Epist.*, I, 17.

is it probable that the Roman landlords, who after all controlled the State, would have adopted a policy so ruinous to their own interests? Or is it possible to suppose that they were so stupid as not to see what would be the result of bringing the Sicilian tithe to Rome? Is it not far more reasonable to suppose that the process we have sketched had actually progressed far by the middle of the third century, that Latium had already become a failure as a grainland, that the landlords had already turned to other industries, and that the Sicilian grain filled a need already keenly felt? It would seem then that the revolution in the agriculture of Latium had already progressed far before the first Punic war.

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THE PURPOSES ACHIEVED BY RAILROAD REORGANIZATION[1]

A railroad reorganization centers about the means chosen to rehabilitate the bankrupt property, and the practical expedients available. It has been recognized by all men concerned in the actual reorganization of a railroad property and by all students of the subject that two primary ends are always present. New money must be obtained from either the old security holders or the new investors, or from both, in order to meet the debts incurred by the receivership, and to provide the reorganized road with new money for improvements and reconstruction. This is admittedly only a temporary aid, but it is necessary, in order to protect the road during the critical period of its rehabilitation. Further, the load of fixed charges, such as bond interest and rentals, the payment of which probably occasioned the railroad failure, must be reduced so as to be well within the earning capacity of the new road. This is the permanent end achieved by the reorganization; it assures a solvent and prosperous railroad long after the period of rehabilitation has passed. The two primary ends of every railroad reorganization are therefore the increase of available capital and the reduction in fixed charges. This article discusses the practical expedients employed to attain these primary ends.

Any generalizations concerning the means employed in contemporary railroad reorganizations must of necessity be very general. All railroads differ among themselves. The specific causes of railway failure are never the same in two instances. Consequently, in order to discuss reorganization plans in any except the most general terms, and to treat of the subject with clearness and definiteness of outline, it is necessary to arrange railroad reorganizations themselves according to some kind of system of classification, else any discussion of the subject degenerates into a mere jargon of unordered cases. But a classification of railway reorganizations is difficult owing to the extreme difficulty of determining a proper system or scheme.

From all points of view, the most valuable way of classifying

[1] Preceding articles are: "The Theory of Railroad Reorganization," published in the December, 1918, number of the AMERICAN ECONOMIC REVIEW (vol. VIII), p. 774; and "The Procedure of Contemporary Railroad Reorganization," published in the March, 1919, number (vol. IX), p. 1.

railroad reorganizations themselves (and the practical expedients used in accomplishing the two primary ends), is in terms of the causes and extent of the embarrassment which occasioned the necessity of reorganization. In other words, reorganizations are best classified according to their causes. Financial embarrassment, actual or threatened, is the cause of the crisis of which reorganization is the remedy. A reorganization, therefore, can be successfully consummated only as it removes the cause, so that any attempt at classification must recognize that the form as well as the concrete details of railway reorganizations will vary according to the nature, extent, and seriousness of the failures which caused them.

There are, in general, three types of railway failure—two pertaining to large railway systems, the third confined to small independent railroads.

The first type, which we will hereafter call *primary failures* and the resulting reorganizations *primary reorganizations*, is the result of an embarrassment which is serious, thoroughgoing, and usually long protracted. This class embraces real financial and economic failures of our large railways. In the actual experience of a particular case, one may assume that the crisis has been coming on for many years. Various palliatives have been applied. Various expedients have been tried; not infrequently some expedient has even approached the scope of a reorganization. Every known device of economy of operation has been tested. Usually the railway system has been over-extended into new or competing territory in the hope of increasing the stability of net earnings through increased gross revenue. Ordinarily, every available prop in the way of association and combination has been tried to increase the available net earnings; every known financial device of lease and guaranty, of collateral trust bond, debenture and short term note, has probably been resorted to in order to secure money and bolster up a declining credit. All these expedients are at most mere palliatives. They avail nothing. The net earnings continue to decline, the bond interest and rentals increase more rapidly than the earnings. The margin available to the stockholders grows narrower and narrower, and the credit poorer and poorer. Such conditions are fundamental. Yet as the current liabilities of a railroad are always relatively small and its floating debt is, or ought to be, insignificant compared with its total capitalization, the conditions described may continue for some time before a

specific crisis brings about an outward acknowledgment of failure. The important consideration, however, is that the railway system as a whole is a failure economically. Its earning capacity cannot justify its capitalization.

The second class, called hereafter *secondary failures* and the resulting reorganizations *secondary reorganizations*, embraces those railroad failures which cannot be called fundamental. The earnings, for a few years past, may have fallen off; bad crops, floods, or strikes in the principal industries may have produced conditions seriously affecting the gross receipts, while the operating expenses and fixed charges remained the same; short term notes or a maturing bond issue may have created financial embarrassment. At all events, a crisis occurs and the railroad's credit cannot withstand it. Failure results. But the causes underlying it are not fundamental. And the remedies that need be applied are neither as comprehensive nor as radical as is necessary with failures of the primary type.

The third type pertains only to small, unimportant, and often unfinished lines of railway. Sometimes the existence of the road was unjustified by the volume of traffic. Sometimes the road was built merely for strategic purposes. Sometimes the road was so grossly overcapitalized and mismanaged, during the construction period, that it became insolvent before it was born. At all events, the railroad is a thoroughgoing failure.[2] But this failure, due to the insignificant importance of the road or the absence of its obvious public necessity, is not of great economic significance. Its securities are probably closely held and the failure is not confessed until the last phantom of its credit has vanished. In the restricted and local significance of the undertaking, and in the extent and thoroughness of their distress, the failures of these little local lines resemble the failures of small local industrial enterprises. Failures of this kind are hereafter called Class III.

The resulting reorganization plans and expedients follow closely this classification of railway failures. The reorganization of a railway, the failure of which is of the first class, is thorough, comprehensive, and radical. Practically all securities, even small underlying closed first mortgage bond issues, are refunded. And

[2] One little railroad of this type, the St. Louis and Hannibal, was organized in 1872 and the main line opened in 1882. In 1886 the company issued first mortgage 7 per cent bonds, yet has never paid a single coupon from then until now. The road has just been reorganized, through refunding these bonds into common stock.

while the holders of these underlying bonds are not ordinarily asked to endure any sacrifices, they are asked to refund their variety of divisional issues into a single comprehensive first mortgage bond issue covering the entire railway system. Ordinarily the interest rate on this single issue is lower than the average rate on the small issues which it refunds, so that it is often necessary to increase the principal or add a complement of junior securities in order to placate these old bondholders. The holders of junior bonds, provided the interest on them can be earned unquestionably, are usually given bonds of a "general" or refunding issue. All other bonds, upon which little or nothing was earned in the years before the failure, are forced to take a preferred stock in the new company. The old preferred and common stocks are assessed, and offered new preferred and common stock. As a result of these changes, a complex financial situation, involving a multitude of small divisional issues, followed by several layers of nondescript bonds, followed in turn by notes and preferred and common shares, is simplified and standardized. There are one or two senior issues of bonds, one issue of preferred stock, and one of common. Considerable amounts of new money are added through stockholders' assessments; the fixed charges are reduced by the refunding of the old underlying and first mortgage bonds into one or two issues of new low interest rate bonds, and by refunding the junior bonds into preferred stock. The reorganization, like the failure it follows, is penetrating, drastic, and comprehensive.

Reorganizations following failures of the second class are superficial compared to those described in the previous paragraph. As the failure is not fundamental, a radical readjustment of the financial structure is neither necessary nor advisable. Accordingly, no attempt is made to disturb more than the stocks and junior bonds, and no radical sacrifice is demanded of any security holder. In many cases the whole reorganization turns on the willingness of the holders of some large overlying issue of refunding bonds, notes, or debentures to refund these into preferred stock or income bonds, bearing the same nominal investment return. The charges on the junior bonds become contingent instead of fixed. In return for this sacrifice from the junior bondholders, the stockholders consent to an assessment, receiving in return securities of relatively high value. As a whole, such a reorganization disturbs a comparatively small number of securities, and these are only the uppermost layers of the financial structure. The failure is not serious and a serious remedy is not required.

Reorganizations of railway failures of the third class are exceedingly drastic. The little road has been bolstered up by every conceivable means. Probably when it failed the earnings were actually less than its expenditures. The rolling stock and roadbed are dilapidated. Consequently, relatively large amounts of receiver's certificates are issued immediately, in order to maintain the road in operation. At the time of reorganization, these must be paid. Yet the value remaining to the stockholders is so slight that they will not endure an assessment in order to maintain even their shadow of an equity. As a result, the full brunt of the reorganization falls on the bondholders. Ordinarily there is a single issue of bonds. Accordingly, the holders assess themselves to pay off the receiver's certificates and to furnish the requisite new money. In effect, they take over the ownership of the road from the old stockholders. In some instances, not only the stockholders' interests are eliminated, but also those of all the bondholders and the road is taken over by the holders of receiver's certificates. In cases of complete failure, the holders of the receiver's certificates may be forced to assess themselves to maintain the operation of the road.

The first of the three types just described stands for serious and fundamental failures followed by drastic and comprehensive plans of reorganization. The other two types are modifications of this—the second type representing less serious failures followed by merely superficial reorganizations, and the third type the utter failures of small local railways. In view, therefore, of the greater significance and greater intricacy of the first type of railroad reorganizations, our study of the expedients to be used in reducing fixed charges and securing new money will refer explicitly to reorganizations of this type. The expedients used in the second and third types are modifications of those employed in the first type.

At the time of the serious failure of a great railroad system with an intricate financial structure, it is found that there exist at least three classes of bonds or fixed charge securities, one or more classes of contingent charge security, and the common stock. The three classes of bonds are of three different levels. The first, both in point of time and priority of security, include the old underlying main line and divisional bond issues created during the period of construction and still secured by first closed mortgages on most, if not all, of the important lines of the railway. The

second level consists of an issue of general first mortgage bonds, and possibly issues of second and third mortgage bonds. These bonds embrace the entire railway system. They represent liens subsequent to the bond issues of the first level, when such exist, and a first lien on such parts of the system not covered by underlying liens. These issues were created after the railway system had taken form—during the period of development, in contra-distinction to the previous period of construction. The third level represents the numerous junior issues of general, consolidated, or refunding mortgage bonds, debentures and short term secured and unsecured notes, issued at subsequent times, usually at a considerable discount, or at a high rate of interest. Owing to the differences in lien, these three kinds of bonds are considered separately in effecting a reduction in fixed charges.

The first step in the problem of reduction of the interest charges on the bonded debt is the determination of the position of the old underlying or divisional mortgages. Invariably, unless the railway system had been reorganized before, and even then unless the previous reorganization had penetrated to the marrow, there will be found a host of underlying bonds, on branch lines and subsidiary roads, that have been allowed to continue in force because there seemed nothing else to do. These carry, ordinarily, high rates of interest, they mature at various dates and are secured by dissociated and often unrelated sections of line.

In a few of the earlier railroad reorganizations a temporary reduction in the charges on these underlying bonds was accomplished by requiring the holders either to refund or else surrender the coupons covering a definite period of years.[3] This effected merely a temporary relief and was based on the presumption that earnings would improve in a short time. It is, however, a method of reducing fixed charges never adopted at the present time, when the guiding principle of every railroad reorganization is to secure permanent strength.

Since the reorganization of the Wabash system in the late eighties, historically the first of the great comprehensive railroad reorganizations of Class I,[4] it has become the established practice

[3] Thus in the Chesapeake and Ohio Railroad reorganization of 1878 the first mortgage bondholders funded the coupons of the three following years into preferred stock and the second mortgage bondholders the coupons of the next six years. A similar plan was followed in the Erie reorganization of the same year.

[4] This particular reorganization is described in the first article of this series, AM. ECON. REV., vol. VIII, p. 774.

to refund most, if not all, of the underlying and divisional issues into a single issue of first mortgage long-time bonds, bearing a low rate of interest and smaller, in principle, than the old underlying and divisional issues. It substitutes a single large bond issue for a heterogeneous mass of small issues; it simplifies the railroad's financial structure. It probably reduces the burden of fixed charges, and it may even reduce the principle of the outstanding bonded debt. From every point of view, therefore, this substitution is of advantage to old bondholders and to the railroad.[5]

The difficulty involved in securing the refunding of these issues lies in adjusting a fair equivalence between the old security and the new, and then in the very great practical difficulty of making the holders of these bonds consent to the exchange. No reorganization can succeed which is opposed by all concerned. No reorganization can succeed which is fundamentally unjust. Much care must therefore be exercised in arranging a fair exchange for the holders of the old bonds.

In determining the relative value of these old underlying and divisional bonds, reorganization managers are concerned with the fundamental property values behind the bonds—not with the legal status or legal phraseology of the bonds and their mortgage. The basis of exchange is economic and not legal. In assessing their economic value, two considerations are of primary importance: the essential earning capacity and the strategic position of the property covered by the bonds. In other words: What does the security of the bonds earn? How important to the reorganized road is the property covered by them? The first question can be answered only in terms of past experience, and it is frequently im-

[5] This is very well expressed in the circular of the Northern Pacific Reorganization Committee of March 16, 1896, advising the holders of the old general mortgage 6 per cent bonds of 1921 covering part of the system to exchange them for 135 per cent of new prior lien 4 per cent bonds of 1997 covering the entire system. "It is manifestly to the benefit of the holders of the General First Mortgage Bonds to secure an investment of longer continuance, and it is also to the benefit of all subsequent securities to diminish this unnecessarily large burden of annual fixed charges. . . . The advantage is obvious of a mortgage resting upon a complete and entire system, including main line and all branches brought into the new company, together with terminals, land grants and equipment, and having over $200,000,000 of bond and share capital behind it, securing a gold bond running for one hundred years, as compared with a bond at all times liable to compulsory retirement and secured by only part of the system." Plan given at length in *Commercial and Financial Chronicle*, vol. 62 (1916), p. 550.

portant to segregate individual station freight statistics and passenger receipts according to the lines covered by separate mortgages in order to ascertain the immediate earning capacity of the lines covered by those liens. This is particularly important in the case of branch and subordinate divisional lines, but of no importance in determining the earning power of main lines owing to the impossibility of allocating the receipts and costs of operation between the main and branch lines. The other consideration, that of strategic importance, can be determined roughly by an inspection of the railway map. The main lines have the greatest strategic importance and must be preserved at all hazards. Those branch lines which run into isolated unproductive territory have least. If the line would be of considerable importance to a competing railway system, the reorganization managers must face the possibility that, in case the bonds are disturbed, the bondholders may bid in the property and sell it to the competing system. In other words, the strategic importance of the line to the reorganized railway is affected by the answer to the question, What would, or could, the bondholders do if they assumed control of the property? If the line could exist independently, the bondholders must be treated liberally; if the line would be of no value independent of the reorganized company, then the bondholders can be counted upon to accept any reasonable offer made to them.

Generally speaking, there are three classes of the underlying bonds, arranged according to the fundamental earning capacity and strategic importance of the lines by which they are secured. There are first the old underlying first mortgage bonds on the main line. These are of primary importance to the system; in fact, without these lines there is no railway system at all, merely unconnected branches. Not only does traffic arise on these main lines, but over them moves the branch line business. The second class includes the later mortgages on the main line divisions—the class just described—and the liens on important branch lines possessing an assured independent earning capacity and considerable, though not essential, importance to the system as a whole. The third class includes the first and subsequent mortgage bonds on unimportant branch lines. Such lines will have failed to earn their fixed charges, and are, from any point of view, of little value to the system as a whole.

In arranging a proper basis of exchange between the old underlying bonds and the new securities to be given in order to refund

them, great care must be exercised that these differences are recognized. In each case the offer of exchange must be sufficiently liberal to guard against the need for large amounts of money to settle with the non-assenting bondholders,[6] yet not so liberal as to defeat the essential end of the reorganization by overburdening the new company with fixed charges. Each class and each issue must be evaluated by itself.

In rare cases, especially if there exist one or two small, main line issues, these underlying bonds are paid off in money.[7]

If one or two of these issues bear low interest rates, or mature shortly, they are allowed to remain undisturbed.[8] Ordinarily,

6 In order to bring the property covered by underlying bonds completely under the cover of a new general first mortgage bond issue, when some of the underlying bondholders refuse to come into the reorganization, it is necessary to foreclose the mortgage. The recalcitrant bondholders are then paid off their proportion of the price realized at the foreclosure sale. It is invariably less than par. In the last Pere Marquette reorganization there were ten underlying and divisional issues. All the bonds of two issues were exchanged, the trustees being able to cancel the issues without foreclosure. Less than 3 per cent of all the underlying and divisional bonds were undeposited and had to be paid in money.

7 Thus in the thoroughly comprehensive reorganization of the Northern Pacific Railroad in 1896 two small main line issues were at first undisturbed and then paid off in money. Together they represented about two million dollars—$1,834,500 Missouri Division 6's (1879-1919) and $369,000 Pend d'Oreille 6's (1879-1919), whereas the property involved in the reorganization exceeded two hundred million dollars.

Ordinarily these small, underlying, high interest rate bonds are worth well above par; and reorganization managers have, in the past, been accused of allowing a default in interest so as to force the holders to accept the payment of their bonds at par. This particular procedure was very vigorously condemned by the editor of the *Commercial and Financial Chronicle* in 1896, when many of the comprehensive reorganizations of the middle nineties were being discussed. "When," in the words of this financial observer, "these old underlying mortgages bear a high rate of interest and have also a good many years to run to maturity, there is of course an obvious advantage to a company in paying them off and replacing them with obligations bearing a lower rate of interest. In such a case it is difficult to resist the conclusion that the default has not been made with design or is not being purposely continued in order to force the holders to consent to the paying off of their bonds or to make concessions which it is not needful or right that they should make."—*Chronicle*, vol. 62 (March 21, 1896), p. 525.

8 Various reasons exist which justify the continuation, undisturbed, of a few of the old issues. Sometimes these issues are so small that it seems inexpedient and too expensive to induce the holders to exchange them. Thus in the comprehensive reorganization of the Erie in 1895 none of the old underlying issues of the original New York and Erie Railroad were dis-

however, even when the issue is of the highest grade of main underlying bonds, the reorganization managers will refund them into a new first general mortgage by offering their holders special inducements.[9] If the new general first mortgage bond issue carries

turbed. Many of these bonds were held in England, many were in the treasuries of insurance companies. All of them commanded a high credit as investment securities, so that it would have been very difficult, if not impossible, to have induced their holders to have exchanged these underlying bonds for any of the second rate securities of the new Erie Railroad, created at the reorganization. Similarly, in the last reorganization of the St. Louis and San Francisco Railroad in 1916, an issue of $9,000,000 underlying first mortgage bonds of the original St. Louis and San Francisco Railway, issued in 1881 and due in 1931, were not disturbed. They had not been disturbed in the previous comprehensive reorganization of the St. Louis and San Francisco Railway in 1896.

Sometimes the underlying issues are destined to mature in a few years, and the saving in interest, through refunding them, will not compensate for the trouble and expense involved. In the numerous comprehensive reorganizations of the middle nineties, these underlying bonds were, for the most part, refunded. This is indicated by the statistics of the fifty-seven reorganizations studied by Meany. They involved approximately $1,250,000,000 of bonds of all descriptions. Of these, less than $200,000,000, or 15 per cent only, were undisturbed.—*Poor's Manual of Railroads,* 1900.

[9] If the securities outstanding upon the main line section are all out of proportion to the earning capacity of the physical property, then there must be a severe cutting down not only of fixed charge bonds but also of the stocks given as a bonus. This is illustrated in the refunding of securities of one of the affiliated Erie companies in the last Erie reorganization. At the time this affiliated line was called the New York, Pennsylvania and Ohio. It had been chartered in 1858 as the Atlantic and Great Western to unite certain small lines in and about Meadville, Pennsylvania, and ultimately became a very important main line link in the Erie's New York-Chicago system. It was financed by a Spanish French nobleman and English capitalists brought into the project by James McHenry, famous in the later history of the Erie railroad. It was a failure from the beginning, although its history, under the administration of McHenry, Gould, and General McClellan, form one of the most dramatic recitals in the history of American railroad promotion. It was successively leased to the Erie, and in the hands of receivers continuously. In 1894 when it finally became an integral part of the Erie system, its capitalization was at the rate of $395,000, a mile—about all of which had been contributed by foreign capitalists. Its reorganization involved one of the most extreme sacrifices which foreign bondholders of a prominent American railroad have been compelled to undergo. The first mortgage bondholders received 20 per cent in new first general 4 per cent mortgage bonds and 27 per cent in stocks. The second mortgage bonds were given only 20 per cent in common stock—then valued on the market at less than $10 a share. Finally the common shareholders of this unfortunate "main line" division were offered 1 per cent of their principal in this same common stock.

a lower rate of interest than these old underlying issues, as is very probably the case, the bondholder must be offered an increase in principal to equalize or compensate for the lower interest rate.[10] Quite often he is offered in addition a bonus of new preferred stock so that, should the reorganized railroad prove successful, he will receive an actual increase in income.[11]

Underlying bonds of the second class, later liens on the main lines and first liens on the important branch lines, can be treated much less tenderly than bonds of the previous class. The holders of this second class can be forced to undergo some sacrifice, because they will recognize that even if they can make their properties pay, should they attempt to operate them independently, it will involve large expense and much trouble. Consequently, they will refund their bonds if the offers of the reorganization

[10] This has been necessary in practically every comprehensive reorganization. The treatment of the underlying bonds in one of the recent comprehensive reorganizations is seen from the table given presently. But the practice was common in the great comprehensive reorganizations of the middle nineties, as these three cases indicate:

Name	Percentage of new bonds	Saving in interest rate (per cent)	Net reduction in fixed charges (per cent)
Norfolk & Western adjustment mortgage 7's......	130	3	1.8
Northern Pacific			
First mortgage 6's......	135	2	.6
Second " "	118½	2	1.3
Third " "	118½	3	2.5

In the case of the Baltimore and Ohio reorganization, the holders of some of the underlying bond issues were offered the principal in low (3½ per cent) first mortgage bonds, and a bonus of 12½ per cent in second mortgage 4's. The exact result was therefore very difficult to compute.

[11] A good illustration of the principle is the treatment of the underlying 6 per cent first mortgage bondholders in the old Toledo, St. Louis and Kansas City reorganization. There was due on these bonds 30 per cent of unpaid interest, yet the earnings of the road were ample to meet the current interest on the bonds. Clearly, the bondholders would expect that their unpaid interest should be paid, yet so much new money was required to meet the necessary charges that it would have been practically impossible for the stockholders to secure the necessary money. A compromise was necessary. The bondholders were given 100 per cent in new 3½ per cent prior lien bonds and in addition 62½ per cent in new 4 per cent second mortgage bonds, and 30 per cent in new preferred stock. By this arrangement they would receive the same stipulated income, $60 a year, but the principal of their bonded lien was increased and the bondholder had the opportunity of an increased income should the reorganization prove successful.

committee are at all reasonable. It is possible, therefore, to count on a slight reduction in fixed charges from this class of bondholders.

The third class of underlying bondholders can be treated very arbitrarily. Their properties have little value. Under no stretch of the imagination could they be made profitable if operated independently. In extreme cases they will not even be admitted into the reorganization. At most they will be given only a small percentage of new fixed charge bonds; and ordinarily they will be offered contingent charge securities such as income bonds, preferred stock, and common stock. Under any circumstances the refunding of this class of bonds will effect a conspicuous saving in the new fixed charges.

These principles can be understood from the detailed study of the refunding operation in one of the recent comprehensive reorganizations, that of the Pere Marquette Railroad in the autumn of 1916.[12] In this reorganization all[13] of the underlying and divisional bonds were refunded into a single issue of general first mortgage bonds—part of which bore 5 per cent interest and part 4 per cent. There were in all eleven separate issues of underlying and divisional bonds, aggregating $26,314,000[14] and carrying fixed charges to the amount of $1,268,160, or an average of 4.8 per cent. These eleven issues occupied very different strategic positions, both with respect to the status of their lien and the geographical position of the section of the railway securing them. The earning capacity of the branch lines varied also. With these differences, it is possible to classify these eleven issues into the three classes described in an earlier paragraph.

As a result of the process of refunding, the principal of these underlying and divisional issues was reduced by five million dollars and the fixed interest charge from $1,268,160 to $982,140, a reduction in charges of over 22 per cent.

Leaving now the whole class of underlying bonds, in the refunding of which no great saving in fixed charges can be anticipated, we come to the second level of bonds, that represented by

12 Throughout this discussion the Pere Marquette reorganization of 1916 is used as an illustrative case. It is the most thoroughly typical of any of the recent reorganizations of Class I.

13 Except for two small issues covering 199 miles of a Canadian subsidiary.

14 In this paragraph and in the tables pertaining to it, no cognizance is taken of the unpaid coupons. These were, for the most part, refunded into the same kind of security as the principal of the bond. A consideration of them, however, merely introduces complexities.

the first mortgage liens covering the entire system. The problem of dealing with these bonds presents no such complexity as that attending the refunding of the underlying and divisional liens. If, as is quite often the case, the interest charges on these bonds were fully earned before and during the receivership, they must be treated with a full consciousness of the strength of their position. As the mortgage covers the entire road, these bondholders would have the power to foreclose their lien on the whole system and put through a reorganization of their own which would exclude both the junior bondholders and all the stockholders. They cannot, therefore, be asked to endure much of any sacrifice, although they can be counted on to coöperate in the simplification of the financial structure of the new road by refunding their bonds. Generally, however, the interest on these general first mortgage bonds was only partially earned before and during the receivership. In this case the bonds are refunded into a fixed charge bond and a contingent charge income bond or stock, the proportion depending on the relative strength of the old bonds.[15] In the extreme cases in which the interest on these general first mortgage bonds was not earned during the receivership, they are invariably refunded into a contingent charge security. Usually this is a preferred stock, ranking after the security given for the stockholders assessments.[16]

15 This is well illustrated by the comprehensive reorganization of the St. Louis & San Francisco in 1916. Following the underlying and divisional liens there were $68,500,000 first general mortgage bonds bearing 4 per cent interest. These were refunded into 75 per cent prior lien 4's—the issue that became the first mortgage or the entire system and the same issue that was given for assessments and used to refund the underlying liens—and 25 per cent of a first income 6 per cent bond, the issue next following the prior lien mortgage. Although the interest on the income bonds was contingent on earnings, the current earnings of the road gave good assurance that the first income bond interest, at least, would be paid. This being the case, the holders of the old bonds would receive a slightly greater investment return, 4½ per cent instead of 4 per cent; but 1½ per cent was contingent.

16 This was exactly the plan pursued in the other recent comprehensive reorganization, that of the Pere Marquette. The reorganization could very well be drastic because, by inordinately large depreciation charges on rolling equipment the receiver had worked out an operating ratio of 106 per cent in 1914! Nevertheless, even if less rigorous charges to depreciation and repairs had been made the operating ratio would be considered about 90 per cent, and the 10 per cent available for interest charges was fully absorbed by rentals and the interest on receiver's certificates and underlying and divisional liens. Consequently the first general mortgage bonds ($8,382,000 consolidated 4's of 1951) were required to accept their principal and unpaid coupon interest at par in new second preferred stock—the security ranking directly after a first preferred stock given for the stockholders' assessments.

The commonest method of dealing with these first general mortgage bonds is to refund them into a mixture of fixed and contingent charge securities, as described in the preceding paragraph,[17] because there is usually grave doubt whether or not, had adequate depreciation and maintenance charges been made, the interest on this level of bond had been rightfully earned. When this method of refunding is used, a sense of fairness demands that the volume of contingent charge securities given to offset the reduction in fixed interest shall be such that if the earnings of the reorganized road prove to be so large as to have warranted the payment of the old rate, then the payments in these contingent charge securities will more than make up the balance. That is, if an old 5 per cent first mortgage bond issue is refunded into 4 per cent bonds, par for par (or into bonds bearing the same rate but with reduced principal), then in addition the old bondholders should be given enough preferred stock or income bonds to amount, when the contingent charge is paid, to more than the reduction in fixed income return. This acknowledges that the first mortgage bondholder, by accepting part payment in a contingent charge security, becomes at least partially a partner in the fortunes of the enterprise. As he accepts a share of the burden of low earnings, he should be given a chance to profit through increased earnings.[18]

17 This was almost invariably the method of treating this level of bonds in the comprehensive reorganizations following the panic of 1893. The actual working out of the procedure, in a rather complicated case, is shown by the final reorganization plan of the Baltimore & Ohio. Details in *Chronicle,* vol. 66, p. 1,235; enlightening summary given in S. Daggett, *Railroad Reorganization* (1908), pp. 24-27.

18 This was illustrated in the refunding of the general first mortgage bonds in the St. Louis & San Francisco reorganization. (See note 15.)

Perhaps the best illustration of this principle on a large scale is afforded by the second Atchison reorganization. The first reorganization of 1888 and the second reorganization of 1895 were actually the successive parts of a single comprehensive reorganization, the first part refunding the underlying and divisional issues and the second part accomplishing a permanent reduction in fixed charges and the collection of new money from the junior security holders. At the time of this second reorganization, the net earnings, as corrected by Stephen Little, were less than six million dollars. The rentals, underlying bond charges and interest on the first general 4 per cent mortgage bonds slightly exceeded this. Consequently the fixed charge on these first general mortgage bonds must be reduced. This was done by giving the bondholder 75 per cent in new first general 4 per cent mortgage bonds and 40 per cent in 4 per cent income bonds. The holder of a $1,000 bond had his fixed income reduced from $40 to $30, but he was given an opportunity to receive $16 more if the earnings exceeded the interest on his own first gen-

The third class of security to be considered in a comprehensive reorganization is the heterogeneous mass of junior securities subsequent in position to the general first mortgage bonds. They may include the consolidated and refunding mortgage bonds, the debentures, and the short-term notes. It is at this point that the greatest saving in fixed charges is invariably made, for the reorganization plan invariably provides that these bonds shall be changed, in large part at least, into income bonds or preferred stock. The accomplishment of this, however, in actual practice involves delicate problems of adjustment. On the one hand, the volume of these contingent charge securities offered in exchange for the junior liens, debentures, and notes, must be sufficiently liberal to induce the holders to accept the exchange, else they will obstruct the course of the reorganization or force the committees to purchase their interest, however small it may appear to be; on the other hand, the volume offered must not be so large as to absorb any equity remaining to those securities offered to the stockholders, else the latter will not accept the reorganization plan and the requisite new money will not be forthcoming. Between this Scylla and Charybdis, the reorganization committee must steer its course. And the matter is to be decided solely on the basis of the exigencies of the situation. If the failure is very serious, as in the case of the Pere Marquette, not only are no fixed charge bonds given for this level of junior bonds, but the holders are required to pay an assessment and take, altogether, only preferred and common stocks in the new company.[19] Whereas if the failure is not so serious these bondholders may even be given a small proportion of their lien in new fixed charge securities. This was the plan followed in the other recent comprehensive

eral mortgage bonds. The exchange made the old fixed charge bondholder a partner in the fortunes of the reorganized Atchison system to the extent that he might be called upon to endure a loss of 25 per cent in his income in time of lessened earnings, while he stood in the position to gain 15 per cent in his income during periods of large earnings.

19 In the comprehensive reorganization of Pere Marquette (seriousness described in note 16) there were three layers of these junior bonds above the preferred and common stock. Only the uppermost layer ($14,000,000 refunding mortgage 4's of 1955) were offered the privilege of exchange—and this into common stock. The two lower levels ($2,000,000 collateral trust notes and $5,000,000 debentures) were treated exactly the same as the old preferred and common stock. That is they were assessed 9¾ per cent and given 10 per cent in new first preferred and 20 per cent in new common stock.

reorganization, that of the St. Louis and San Francisco.[20] Ordinarily, however, judging from the comprehensive reorganizations of the latter nineties, the holders of these junior securities have been neither assessed, nor given new fixed charge bonds. They have been asked to accept, par for par, a preferred stock or an income bond. In this way, the refunding of them involves no change whatever in the gross capitalization of the road, but does involve the total extinction of the fixed charges previously carried by them. In fact, it is true to say that the major reduction in fixed charges at the time of a comprehensive reorganization of a railway occurs on these levels of junior bonds.

From this analysis, it is possible to summarize the practical expedients observed at the present time for reducing the fixed charges at the time of a thorough and comprehensive railroad reorganization. The old underlying and divisional bonds are refunded into one blanket issue, bearing a lower rate of interest. The ratio of exchange is determined in each case according to the earning power and strategic position of the property covered by the lien. On this level there is little reduction in fixed charges. The general first mortgage bonds are refunded into new general mortgage bonds, with ordinarily some slight saving in charges—the relative amount depending on the margin, if any, of net earnings available to the old general first mortgage bonds. All the bonds junior to these first mortgage bonds are refunded into a contingent charge security, involving the total extinction of fixed charges.

The methods of reducing the fixed charges in reorganizations of the second class—superficial reorganizations following temporary embarrassment or less serious failures—are mere modifications of the methods just described. As the failures of this class are less serious, so the sacrifices demanded of the security holders are less serious. The reorganization is less penetrating; it affects only the superficial layers of the financial structure.

In a reorganization of this class the underlying and first mort-

20 There was only one bond issue on this level to be dealt with in the last reorganization of the St. Louis & San Francisco,—this $70,000,000 "general lien" 5's of 1927. These bonds were given 25 per cent in new prior lien 4's (the premier security of the reorganized road), 25 per cent in first income 6's and 50 per cent in second income 6's. Although extremely doubtful, still there was a possibility that, even with proper maintenance, something had been earned on these bonds. An allowance of 25 per cent in principal and 20 per cent in fixed income return was an acknowledgement of this possibility.

gage bonds are in no way affected. The railroad, both in the period before the crisis and during the receivership, fully earned the interest on these bonds. But this is not true of the junior securities. The interest on these was not earned and the apparent necessity of paying it precipitated the crisis. At this level, and only here, it is expedient and just to demand a sacrifice. Accordingly, the holders of these junior bonds are asked to refund them into contingent charge securities—income bonds or preferred stock. This involves the total extinction of the obligatory interest. These junior bonds, together with the stocks, are the only securities disturbed in a reorganization of this kind. And the new preferred stocks or income bonds given in exchange are quite as valuable as the old junior bonds, considering the decreased earnings of the road, so that little real sacrifice is asked of any of the bondholders.

Within recent years there have been three reorganizations of this class among important railroad systems. They were the last reorganization of the Wabash in 1915 and the very recent reorganizations of the Chicago, Rock Island and Pacific, and the Missouri Pacific. The plan adopted was exactly the same, except for individual peculiarities and unimportant details. The underlying and divisional bonds were undisturbed. The general first and second mortgage bonds were undisturbed. In each case the decrease in fixed charges was brought about by refunding one or more issues of junior bonds into a preferred stock, having a position just one step inferior to the security given for the stockholder's assessments. That is, the uppermost layer of bonds was refunded into a medium grade stock. Absolutely nothing was done to disturb any of the other layers of bonds.

Reorganizations of small local roads, the third class defined in the opening paragraphs of this article, are invariably very drastic. They follow very serious failures; so serious, in fact, that it is often doubtful whether or not the first mortgage bondholders have much of any real equity remaining to them. As a general rule, the financial structure of these little roads is simple—a single issue of first mortgage bonds and the common stock. As the failure is not admitted until conditions are very serious, the receiver is forced to issue receiver's certificates immediately. By the time the reorganization occurs, it happens not infrequently that about all the value of the railroad, as evidenced by its earning capacity, is limited to these issues of receiver's certificates. Consequently,

when the road is actually reorganized, the burden falls back on the shoulders of the holders of the first mortgage bonds, provided they wish to retain any equity above the receiver's certificates. In extreme cases, even, the holders of receiver's certificates may be called upon to make a considerable sacrifice in order to permit the railroad to continue in operation.

The reduction in fixed charges, although the more permanently important end of a railroad reorganization, must be accompanied by the immediate investment of new money, else the solvency of the new railroad is jeopardized from the very beginning. This new money is required to pay off the receiver's certificates, to settle with the creditors who are unwilling to take new securities, to meet the expenses of the reorganization, and finally to provide a fund to improve and rehabilitate the reorganized railroad.

There are two and only two ways by which this new money can be provided. Junior securities may be sold to the old stockholders who are thus lured into adding to their already bad investment by the promise of securing a stock interest in the new railway corporation; or securities, usually senior bonds, of the new corporation may be sold to an underwriting syndicate of bankers, who in turn offer them to the outside public. In the larger reorganizations following the panic of 1893, only the former expedient was employed. In all the recent important reorganizations, including those of Class I and Class II, both expedients were used.

The use and importance of assessments on old security holders has steadily increased since the reorganizations of the period following the panic of 1873.[21] They are in accord with the general

[21] Daggett concludes from the cases examined by him that assessments were more frequent after the panic of 1893 than before (*Railroad Reorganization*, p. 351). This would seem to be borne out by the presumption that the later reorganizations were more drastic than the earlier ones. On the other hand, the statistics of the fifty-seven reorganizations between 1884 and 1899, gathered by Meany, do not seem to support this belief. Of the fifty-seven, seventeen plans were announced prior to January 1, 1894. Of these, thirteen involved assessments on either or both stocks and bonds; of the forty plans announced after 1894, twenty-five involved assessments, or 62½ per cent (*Poor's Manual of Railroads*, 1900). The present writer believes that the generalization of Daggett is correct; and that the opposite conclusion to be drawn from Meany's statistics is due to the fact that he included many small financial readjustments. Many students of the subject, by a confidence in mere ungraded statistics, do not give sufficient attention to the distinction between large and small reorganizations, and the individual conditions of the preceding failure. Certain it is that not a single important railroad reorgani-

tendency to impose drastic sacrifices on the holders of the old securities as the price that enables them to preserve the shadow of their equity.

These assessments arise from the necessities of the road, and their distribution among the different classes of security holders is, unfortunately, treated much more as a problem of expediency than of justice. The fundamental economic and legal distinction between the stockholder and the bondholder is usually forgotten, and it is growing more and more to be the practice of railroad reorganizations to look at the position of all the classes of junior security holders as differing among themselves only in degree and not in kind. And while it is recognized that the common shareholders ought to suffer most in a reorganization, the members of the committee are concerned more with securing the required amount of money, somehow, than with meting out justice in accordance with a more or less obsolete distinction between owner and creditor. The second Atchison reorganization marked the transition from the old theories of reorganization to the new[22] and this very point is excellently illustrated by a circular sent to the junior bondholders at the time. After stating that the amount of money to be raised amounted to $14,000,000, the reorganization committee went on to say:

> The stockholders in the ordinary course should provide the whole of this amount . . . but the proportion of the assessment that would be borne by the stockholders could only be gauged by the amount of assessment that they would be willing to pay in order to protect their rights. This amount is believed to be $10 per share, and it is necessary that the second mortgage bondholders shall provide the remaining $4 for their own protection.

This statement at the time of the last Atchison reorganization embodies the theory of allotment of assessments now universally followed by railroad reorganization managers. The amount of money required is first determined from the reports of the engineers, traffic experts, attorneys, and receivers. The amount of assessment which the common stockholders will stand is then estimated by the bankers, their judgment being guided by both the current market price of the common stock and the probable market price of the new preferred and common shares which the reorgani-

zation has occurred from 1893 down to the assumption of federal control that has not been predicated on a considerable money payment by the security holders. Tables giving assessments in recent reorganizations are given later.

[22] This matter was discussed at some length in the first article of this series.

zation managers propose to allot to the common stock. The same processes of reasoning are applied to the old preferred stock. If the amounts which the two classes of stock are probably willing to pay in order to retain an interest in the reorganized railroad are not equal to the amount which must be raised from the security holders, then the remainder is assessed against the junior bondholders. Entirely practical questions fix the relative amounts of assessments. How much does the road need and how much can be drawn out of each class of security holder and how little given in return? In accord with this principle, based on expediency and not on justice, the assessments on the stocks of roads passing through a serious crisis, Class I, are smaller than those on roads suffering from a temporary embarrassment, Class II. The stockholders have less at stake in the former case and can therefore be counted on to contribute less.

In the recent reorganization of the Pere Marquette, illustrative of Class I, these principles are exactly portrayed. In order to secure the requisite amount of money, not only were the three classes of stock required to pay an assessment, but the two classes of junior bondholders were also called upon as well. A preferred stock was offered for the assessment, and only a small bonus of common stock. Under these circumstances, the common and even the preferred stock-holders would be willing to pay only a small assessment. It was fixed at 9¾ per cent. Moreover, since little or no value remained to the equity of the junior bondholders, no distinction was made between any of the junior securities. The reorganization managers considered them all equally bad. And if the assessment was placed as low as 9¾ per cent, the full requirement of new money could be obtained only as the two outermost layers of junior bonds paid the full assessment, just as if they had been common and preferred stockholders.

In the other recent comprehensive reorganization, that of the St. Louis and San Francisco, a somewhat different means was taken. A valuable security, general first mortgage bonds, (the same issue as that into which the underlying bonds were refunded and the same bonds that were sold to an underwriting syndicate) was offered to the stockholders, for their assessments. Under these circumstances the payment of a large assessment could be counted on, especially as a liberal bonus of common stock was offered with the bonds. Accordingly, the assessment was made 50 per cent, but arrangements were consummated at the same time to

enable stockholders to sell their new bonds so as to reduce the assessment.

In reorganizations of Class II, those following temporary embarrassment rather than serious failure, the assessments to the stockholders are consistently large. As already pointed out, the expediency of these large assessments is based on the presumption that, since the equity remaining to the stockholders is large, they will endure a large assessment in order to preserve it. And, again, because the railroad property has a value well above the bonded debt, the new securities offered in exchange for the assessments and the bonus of common stock can be made very liberal.

The following table illustrates these principles:

ASSESSMENTS IN RECENT IMPORTANT REORGANIZATIONS.

Railroad	Old security assessed	Amount of assessment (per cent)	Amount of new security given for assessment	Kind of new security given for assessment	Common stock bonus (per cent of par of old security)
organizations of Type I.	Collateral				
Pere Marquette	trust notes	9 3/4	10	1st pfd. stk.	20
	debentures	9 3/4	10	"	20
	1st pfd.	9 3/4	10	"	20
	2d pfd.	9 3/4	10	"	20
	common	9 3/4	10	"	20
St. Louis & San Francisco	1st pfd.	50	50	prior lien bonds	100
	2d pfd.	50	50	"	90
	common	50	50	"	82
organizations of Type II.					
Missouri Pacific	common	50	50	gen. mort. bonds	100
Rock Island	common	40	40	pfd. stk.	100
Wabash	pfd.	30	50	1st pfd. stk.	50
	common	30	50	"	45
Western Maryland (voluntary)	pfd.	30	30	1st pfd.	100 (in 2d pfd.)
	common	30	30	1st pfd.	100
Wheeling & Lake Erie....	1st pfd.	27	27	pfd. stk.	100
	2d pfd.	27	27	"	90
	common	27	27	"	87½

Taking these important reorganizations as a whole, it appears that the following conclusions may be drawn.

1. In no case was there a difference in the rate of assessment for different classes of securities in any single reorganization.

2. The average rate was approximately 34 per cent, averaging each reorganization as a unit, and a trifle less than 30 per cent,

if each assessed security is considered a unit. Omitting the low assessment on the Pere Marquette securities the average was approximately 40 per cent by either way of computing it.

3. In cases where more than one class of security was assessed in the same reorganization, the security given for the assessment was always the same, and the differences in the allotment of the common stock bonus was negligible.[23]

[23] Were we to compare these reorganization assessments with those of the earlier reorganizations, we should find certain striking differences. In the first place, these assessments are larger; more money is now secured at the time of reorganization than was once. Formerly, especially in the reorganizations preceding the panic of 1893, a painstaking effort was always made to apportion the burden of assessments more nearly upon the relative position of the stocks. The common stockholder was usually asked to pay more than the preferred on the assumption that the burden should rest more heavily on those

TABLE 1.—EARLY REORGANIZATIONS.

Railroad	Date	Old security assessed	Amount of assessment (per cent)	Amount of new security given for assessment (per cent)	Kind of new security given for assessment
New York & Erie (Erie)	1859	preferred	2½	none	none
		common	2½	none	none
Erie Railway...	1877	preferred	2	none	none
		common	4	none	none
		or			
		preferred	3	3	income bonds
		common	6	6	income bonds
Denver & Rio Grande....	1885	common	8		
East Tennessee	1886	income bonds	5	5	1st pfd. stock
		common	6	6	2d pfd. stock
Reading	1886	income bonds	2½	2½	pfd. stock
		preferred	10	10	" "
		common	10	10	" "
Pittsburgh & Western.....	1887	common	4	8	pfd. stock
New York, Chicago & St. Louis	1887	preferred	10	10	1st preferred
		common	10	10	"
Iowa Central...	1888	debentures	2½	2½	debentures
		1st preferred	5	5	"
		2d preferred	10	10	"
		common	15	15	"

Average assessment on preferred stocks.... 5 per cent
" " " common stocks...... 7½ " "
" " " stocks .... 6.3 " "
Assessments on bonds unusual in reorganizations of Classes I and II.

In any reorganization, the practical determination of the amount of an assessment is a matter of great moment. It must yield all the new money required by the reorganization. Yet great care must be taken that the assessment is not so large as to frighten

TABLE 2.—IMPORTANT REORGANIZATIONS OF THE MIDDLE NINETIES.

Railroad	Old security assessed	Amount of assessment	Amount of new security given for assessment	Kind of new security given for assessment
Northern Pacific	preferred	10		
	common	15		
Richmond Terminal	common	10		
Erie (N. Y. L. E. & W.).......	preferred	8		
	common	12		
Baltimore & Ohio........	1st preferred	2	2	preferred stock
	2d preferred	20	20	"
	common	20	20	"
Atchison	second mortgage and income	4	4	preferred stock
	common	10	10	"
Reading	deferred income bonds	4		
	1st, 2d, 3d income bonds	20		
	common	20		
East Tennessee.	1st preferred	3		
	2d preferred	6		
	common	7½		
Union Pacific..	common	15		
Toledo, St. Louis & Kansas City	preferred	20	75	preferred stock
	common	12	25	"
Wheeling & Lake Erie....	preferred	12	12	2d preferred
	common	9	9	"

Average assessment on preferred stocks 9 per cent.
" " " common " 12½ " "
" " " stocks 11 " "
Assessment on bonds unusual in reorganizations of Classes I and II.

who would reap the largest benefit from pronounced success. The amount and the character of the assessments in the older reorganizations can well be illustrated from a series of tables of important reorganizations at different periods of financial history. The lists are in no sense exhaustive, although it is believed that the tables cover a fair random selection of important reorganizations.

Meager though these statistical tables may appear, they afford excellent material for exhibiting historical contrasts and the direction of the current

the stockholder into relinquishing his interest. To prevent this, the presumptive value of the new securities must be at least a little greater than the market value of the old stocks, together with the assessment, else the stockholders will voluntarily allow their interests to die. Unless the equity remaining to the junior security holder is considerable, the assessment should be just large enough to induce its payment.[24] If the equity properly belonging to the stockholders is large (the embarrassment being easily attributed to specific and easily remedied causes—reorganizations of Class II, as heretofore defined), a very heavy assessment may be levied on the stockholders, as in the reorganization plans of the Missouri Pacific and Rock Island railroads in which the stockholders were asked to contribute $50 and $40 a share respectively.

in financial opinion concerning reorganization assessment. In the first place, it is unquestionably clear that the tendency has been toward increasing the amount of assessments. Of the eight representative reorganizations prior to the panic of 1893, the average assessment was only 6 1/3 per cent—and the assessments levied on the common stocks were conspicuously higher than on the preferred stocks and junior bondholders. A distinct effort was made to apportion the burden in accordance with the priority of the risk. Among the reorganizations of the nineties, the average assessment was 11 per cent, and there was less difference between the assessments on the different classes of stocks. Finally, among the recent important reorganizations (table given on page 297), the average assessment was 34 per cent; in fact, in two large and important reorganizations the assessment was 50 per cent. The tendency, too, is to apportion the assessment more evenly among the various junior security holders.

There seems to be little change in regard to the kind of security given in return for assessments. Except in rare, but rather conspicuous, instances, the new corporation gives the full par value of the assessment in a contingent charge security having first claim after the fixed charge bonds. This preferred stock or income bond is ordinarily the prior contingent charge security, so that it has a first claim on any surplus earnings above those necessary to meet the fixed charges of the new corporation.

24 An excellent example is offered by the Wabash reorganization plan of April, 1915. Quotations are taken as average for a period of several weeks surrounding the announcement of the plan.

Stock	Market value of old shares	Money assessment	"Curb" quotation for the allotments of first preferred and common stocks received for the assessment ($48 for 1st pfd. and $14 for the common)
Common	.75	$30	$30.30
Preferred	1.37	30	31.00

But great care must be exercised that the assessment is not too large, else litigation will result;[25] or, at most, the stockholders will drop out.

The possibility of a dispute with dissenting stockholders may sometimes be avoided—especially in the case of less serious failures, where large amounts of new money are not essential to a successful reorganization—by giving the common stockholder the option to receive a small amount of new common stock without the payment of an assessment, or to pay an assessment and get more liberal amounts of new securities.[26] The apportionment of the assess-

[25] In the reorganization of the Houston and Texas Central (1888), the stock was assessed over 70 per cent—the highest assessment of which the present writer has learned; but serious and long protracted litigation resulted. The plan was first announced covering exchanges for all the bonds. It was accepted by all the bondholders, who, considering that the new bonds were guaranteed by the Southern Pacific Company, were actually benefited by the reorganization. The first announcement contained no stipulation concerning the stock assessment. Some three months later it was announced to be 40 per cent and still later 73 per cent. Protracted litigation resulted, in the courts of Texas and New York. Ultimately, a compromise was effected with the dissenting stockholders.

[26] Strange to note, the alternative of paying or not paying an assessment is confined to the two extremes—very mild, usually voluntary, readjustment reorganizations, and very drastic reorganizations in which all the junior security holders are eliminated. (Class I and especially Class III, to be discussed presently.) But there are specific reasons to account for this anomaly. In the case of the less serious reorganizations, merely readjustments, no foreclosure sale of the property is contemplated. The stockholders cannot, therefore, be forced into paying the assessment. All that can be done is to cajole them into paying it by offering a more liberal amount of new securities than if they refuse. The following examples illustrate this:

Railroad	Old security assessed	Amount of assessment	New securities
Minneapolis & St. Louis..	common	$20	$78 in common stock
	"	none	22 " " "
	preferred	$20	80 " " "
	"	none	70 " " "
Western Maryland	common	30%	(*Per cent*) 45 in valuable coal company stocks
			30 " 1st preferred
			100 " common
	common	none	100 " common only
	preferred	30%	45 " valuable coal company stocks
			30 " 1st preferred
			100 " 2d "
	preferred	none	100 " 2d preferred only

ment between the holders of the common and preferred depends on expediency entirely.[27] Presumably the preferred stockholder is in a stronger position than the common stockholder, but experience has shown that he will be compelled now[28] to bear quite as much of the burden as the common stockholders.[29] Sometimes, although not very often, the assessment on the preferred stock is greater than on the common,[30] on the assumption that the preferred share-

At the other extreme, the very drastic reorganizations are usually consummated through foreclosure by the underlying or first lien senior bondholders. To make the reorganization effective, and to reduce the payments to the non-assenting bondholders, most, if not all the bonds should be brought into the reorganization plan. This can be done best by offering an alternative consisting of a liberal participation to those electing to pay an assessment, and a smaller allotment of new securities to those who do not.

The following examples illustrate this. They are all Class III reorganizations. The principles governing the assessments on this class will be discussed presently. All securities, junior to the first mortgage bonds, were wiped out in every case.

Railroad	Assessment	New securities given (per cent)		
		1st lien security	2d lien security	Common stock
Gulf, Florida & Alabama	25	50	25	25
	none	10	10	10
New Orleans, Texas & Mexico	20	20	50	50
	none	0	40	25
Western Pacific	36	40	55	45
	none	0	12½	50

27 Daggett is in agreement with this view when he says with reference to the reorganizations since 1908: "In most instances referred to, common and preferred stock fared alike or so nearly alike that the differences were negligible." "Recent Railroad Failures and Reorganizations," *Quarterly Journal of Economics,* vol. 32 (May, 1918), p. 477.

28 The contrast between contemporary and past reorganization theory in this particular is brought out in note 23.

29 This principle is recognized by practical observers of reorganizations, especially by the professional trader who seeks to profit by the wide fluctuations in security values before and after a reorganization. For example, during the autumn of 1914, when the Pere Marquette was in the hands of receivers, a shrewd trader in Boston offered to give 100 shares of the preferred stock in exchange for 100 shares of common and a bonus of $100 in money. He believed that in any reorganization the common would fare as well as the preferred stock, and he would have $100 to his advantage. Unfortunately, for our sense of abstract justice, he was right.

30 The Toledo, St. Louis and Kansas City reorganization required $20 a share from the preferred stockholders and $12 a share from the common.

holder, having more at stake, will endure more without throwing away his security. In no recent case was the assessment on the preferred stock less than on the common. This principle is unfortunately unjust, but reorganizations are guided by expediency and coercion and not by abstract justice.

The discussion of assessments in reorganizations of Class III was purposely omitted from the summaries just given. Each reorganization of this type represents the effort to rehabilitate a small road after a very drastic failure. It is invariably done by the first mortgage bondholders, who alone have any value remaining to their securities. If the road is on the whole profitable, provided the immediate cause of its failure is removed, it may be possible to effect a reorganization without an assessment on the bondholders. In such cases the bondholders merely surrender a part or all of the fixed return on their security, in order that the reorganized road may divert the net income, that would otherwise go to pay interest charges, to its rehabilitation.[31] Ordinarily, however, new money must be had and the first mortgage bondholders alone have sufficient interest in the property to be willing to undergo even a slight sacrifice in order to maintain the existence of the railroad. Such cases are illustrated by a few recent reorganizations of Class III.

The radical failure of these little roads is apparent from this table, without further explanation. In one case, the holders of receiver's certificates were actually assessed.[32] All the arts of finan-

[31] A thoroughly typical case of a reorganization of a Class III road following just this plan is that of the Buffalo and Susquehanna Railroad. This road was built in the middle nineties to reach certain coal fields in northern Pennsylvania. It was fairly successful. In 1907 the Buffalo and Susquehanna Railway, the connection to Buffalo, leased the Railroad. The Railway defaulted on its rental in 1910, and the Railroad soon after defaulted on its bond interest. A receiver was appointed for the Railroad, who, through excellent management, proved that the Railroad alone, without the Railway, was a successful enterprise. In the reorganization, the bondholders were merely asked to surrender 30 per cent in principal and interest of their bonds, in return for liberal bonuses of preferred and common stocks. No assessments were levied on the bonds, because the sale of a small amount of the bonds of the new road, and its normal earnings, would meet fully the costs of the reorganization and the rehabilitation of the road.

[32] Besides the unfortunate Detroit, Toledo and Ironton case, a few other cases exist in which the holders of receiver's certificates were required to undergo a sacrifice. In the reorganization of the Atlanta, Birmingham and Atlantic Railroad in 1914, the holders of $4,476,000 receiver's certificates were required to accept a junior lien 15-year income bond. It is interesting to note

RECENT REORGANIZATIONS OF SMALL ROADS (CLASS III).

Railroad	Old security assessed	Amount of assessment	Amount of new security given for assessment	Kind of new security given for assessment
Cincinnati, Indianapolis & Western	1st mortgage bond	30	30	1st mortgage bonds
Detroit, Toledo & Ironton	receiver's certificates	25	41⅔	income bonds
	general lien bonds	35	58⅓	"
	consolidated bonds	10	16⅔	"
Gulf, Florida & Alabama	1st mortgage bonds	25	25	receiver's certificates
Oklahoma Central.	1st mortgage bonds	40	40	1st mortgage bonds
New Orleans, Texas & Mexico....	1st mortgage bonds	20	20	1st mortgage bonds
Wabash, Pittsburgh Terminal	1st mortgage bonds	30	30	preferred stock
Western Pacific...	1st mortgage bonds	36	40	1st mortgage bonds

cial persuasion[33] were used to stimulate the interest of the recalcitrant bondholders. In many instances, the bondholders failed to subscribe, preferring to lose their original investment rather than to meet a heavy assessment and thereby acquire securities of doubt-

that in both the Detroit, Toledo and Ironton, and the Atlanta, Birmingham and Atlantic cases the holders of equipment obligations were paid off at par—in the latter case at the time of reorganization, and in the former case through the liquidation of the equipment. Equipment obligations are invariably paid, or left undisturbed at the time of reorganization. For discussion of treatment of equipment obligations see a study of the subject in AMERICAN ECONOMIC REVIEW, vol. VII, June, 1917, p. 353 ("Railroad Equipment Obligations," by A. S. Dewing).

[33] One unusual and ingenious instance of personal advantage dangled in the face of the bondholders in order to induce them to pay an assessment is afforded by the reorganization of a little road called the Nevada Central in 1888. In the reorganization there were issued no fixed charge bonds, but only 1st mortgage 5 per cent non-cumulative income bonds—due in fifty years. If, however, any bondholder would pay an initial assessment of 12 per cent on the par value of the bonds, a corporation known as the Nevada Company of New Jersey agreed to guarantee the payment of the semi-annual interest during the last forty years of the life of the bond.

ful value in an enterprise which had shown itself to be a failure.[84]

Whether obtained through the assessments on the old security holders or through the sale of new securities to the public, it is necessary for responsible parties to insure that the new railroad corporation receives the money expected. This is done by the underwriting reorganization syndicate, an important and necessary corollary of practically every reorganization plan. Formerly, the "reorganization trustees" were clothed by stockholders, creditors, and the courts, with sufficient power to superintend the reorganization and secure for the corporation sufficient money. But as one of the two ultimate purposes of every reorganization is to secure liquid capital for the new corporation, no reorganization can be

[84] A good illustration of this is the reorganization of the Wabash Pittsburgh Terminal Railway. This little road was built as the Pittsburgh link in a prospective Gould transcontinental system of railroads. The property of the company represented an actual investment of $46,000,000, of which over $28,000,000 represented the cost of the terminal in Pittsburgh, and a short section of 60 miles of road forming a junction with the Wheeling and Lake Erie Railroad and some equipment. The remainder represented the cost of investments in coal properties, a belt line, and the controlling interest in the stock of the Wheeling and Lake Erie Railroad. To finance these expenditures, reputable New York banking firms sold $30,000,000 of the first mortgage bonds at approximately 91½. They were acquired by investors throughout the East; in fact, trust funds such as those of educational institutions were placed in them. Some $20,000,000 second mortgage bonds were also sold although they were of an admittedly speculative character. In 1907, with the collapse of the Gould aspirations for a transcontinental railroad system, the Wabash Pittsburgh Terminal Railway passed into the hands of receivers. For upwards of eight years it was operated in an extremely inefficient manner by receivers. The gross and net earnings fell off each succeeding year; the first mortgage bonds declined to a value of 1—$10 for a $1,000 bond; and second mortgage bonds became practically worthless—$1.25 for a $1,000 bond. Finally, in 1915, a plan of reorganization was announced involving the assessment of $300 on the first mortgage bonds, the holders to receive only non-cumulative preferred stock of a new company in exchange for their assessment. The second mortgage bonds were entirely eliminated as well as the stock. One firm of Wall Street brokers wrote to their customers: "If our surmise proves to be true, it will not pay the bondholders to throw good money after bad. Better let the property go on the auction block for what it will bring as junk and real estate. If this is done, it may happen that the bondholders will get more than two cents on the dollar." (Schmidt and Gallatin, *Weekly Review,* July 2, 1915.) A very large proportion of the bondholders refused to pay the assessment, preferring to see the extinction of their original investment. When this plan was announced, an editorial writer of the New York Times *Annalist* remarked: "The experience of these particular bondholders goes to show how very little indeed there is in a name."—*Annalist,* vol. 6, (July 5, 1915), p. 3.

carried through, no matter how just, unless the sources of new money or new credit are certain. Even though an assessment is imposed on the old stockholders, there is no necessity that they will pay the amount; in fact, it is sometimes quite uncertain whether or not any large proportion of the stockholders of a road whose shares are selling for less than ten dollars a share, will pay an amount greater than the market value of their shares. Although the acceptance of a reorganization plan by a committee of large stockholders may give an assurance that a goodly proportion of the assessments will be paid, the attitude of the rank and file of the stockholders will remain unknown until the plan of reorganization is actually put into execution. Meanwhile, the corporation must be assured that in any event the new money will be available. And, further, the willingness of the members of the syndicate—usually represented by prominent bankers—to furnish money to the new corporation, gives a sentimental support to the justice of the reorganization much greater than the exhortations of the reorganization committee.[35] It is this moral support of the reorganization, often quite as vital as the financial support, that justifies the expense and importance of the syndicate.[36] And in the matter of financial support a syndicate may guarantee the payment of the assessments by the security holders, and it may purchase outright an issue of new securities to be sold to public investors in the open investment market.[37] So important, indeed,

[35] It was the success of the late J. P. Morgan in formulating reorganization plans which gradually gave him such a position, during the railway readjustment of the nineties, that his name in connection with any reorganization carried more weight than that of any other banker. As a result, all the important railroad reorganization syndicates, with the exception of the Atchison and the Union Pacific, were managed by the banking house under his control.

[36] Frequently, also, the support of the credit of the new company in the stock exchanges and among the "curb" brokers and "specialty" houses is a matter of great importance. It takes tangible form in the efforts of the underwriters to support the market for the reorganized company's new securities. When a security has any value, trading in it is inevitable. Once the bonds of the new company have been issued, a market will be formed for them, somehow, by those who are forced by circumstances to realize on them before the road has begun to reflect the results of its rehabilitation. The syndicate cannot let the bonds go begging on the market among the curb brokers. Such a course would do lasting injury to the credit of the road and themselves. They must be ready to "hold the basket."

[37] The various purposes of an underwriting syndicate are well stated in the reorganization plan of the Baltimore and Ohio Railroad. An outline is given in Daggett, *Railroad Reorganization*, p. 346.

are these underwriting syndicates that almost without a single exception, every railroad reorganization of even medium importance consummated since 1890 has been supported by an underwriting syndicate.

A syndicate of some form guarantees the payment of the assessments levied on security holders in practically every reorganization[38] and unless the terms offered the stockholders are very onerous, bankers can always be found to underwrite these assessments for a reasonable commission. The syndicate agreement takes the form of an obligation on the part of the incorporators or others responsible for the new railroad to pay the syndicate either a net commission on the entire aggregate assessment or else a round sum, in the form of a fee. In consideration of this commission or fee, the syndicate contracts to assume the place of any assessed security holder who refuses to pay his assessment. This implies that the syndicate will pay the assessment of the defaulting security holder, and take over the securities of the new corporation allotted to him. As a result of the foreclosure sale, the rights and interest of the defaulting security holder in the new corporation are extinguished.

The ease with which a reorganization committee may secure the underwriting of its plan, and the amount of commission or fees demanded from the new corporation will depend on the amount of risk involved. But, unlike other underwriting syndicates where the payment of money is insured, the syndicate managers can obtain a fairly accurate idea of the extent of the stockholders' probable payments. If they feel that in any plan suggested to them a very large proportion of the old security holders will fail to meet the assessments, the syndicate managers will insist that more liberal terms be offered. If the failure is severe, the old stocks commanding only a nominal market value, and if considerable assessments have to be levied on the old security holders, it may happen that no bankers can be found who will consent to arrange an underwriting syndicate. In such cases, junior bondholders are forced into assuming the status of an underwriting syndicate in

[38] Of course there are exceptions. The securities given in the recent Pere Marquette reorganization, in return for assessments, were thought to be so valuable that the reorganization managers believed that they could sell the securities of a defaulting bond and stockholder for the amount of the assessment. Hence they did not feel justified in paying a syndicate a commission for underwriting the assessments. But they did pay a syndicate a "commission" for purchasing some of the bonds.

that their participation in the reorganization is made conditional upon their willingness to guarantee the stockholders' assessments. Under these circumstances, the junior bondholders have divided among them the unpaid stock assessments and take over, in corresponding proportions, the new securities to which the defaulting stockholders would have been entitled.[39]

The other important service of an underwriting syndicate at the time of reorganization is the direct purchase of a considerable block of securities of the new corporation. Ordinarily, these securities occupy the status of a general mortgage bond, senior to all the new securities issued at the time of reorganization, but junior to the first, prior lien, and divisional bonds left undisturbed by the reorganization.[40] In fact it may even be said that there has been no large and comprehensive railroad reorganization during the last decade which has not involved the purchase of new securities by a syndicate of bankers as well as the guarantee of the payment of the stockholders' assessments.[41] These purchases are ordinarily made by the same syndicate that guarantees the payment of the stockholders' assessments,[42] the two transactions being regarded as part of one agreement.[43]

39 Such a case is excellently illustrated by the last Wabash reorganization. There were outstanding a little over $40,000,000 junior bonds known as "first and refunding fours." These were to be refunded into second preferred stock at a ratio of 120 per cent. But at the same time, these bondholders were required to assume the payment of the assessments for the delinquent common or preferred stockholders. If all the stockholders paid their assessments, the bondholders would not be assessed; but if none of the stockholders paid, their participation involved a maximum liability of $682.76 for each $1,000 bond. These bonds were then selling at $200 in the open market.

40 Such statements are, assuredly, subject to many exceptions. Sometimes the underwriting syndicate will buy for money, even the common stock of the new railroad. For illustration, in the very drastic reorganization of the Atlanta, Birmingham and Atlantic in 1916, the entire common stock was wiped out, and no attempt was made to levy any assessments on any securities. New money was obtained by the sale to a syndicate of the common stock of the new corporation at $12 a share, subject to a commission of 6 per cent in cash.

41 The combination of the two functions was very common in the middle nineties, but not quite to the extent that it is now. Of fourteen typical reorganizations studied by Daggett "four provided cash by assessment, three by the issue of securities and five by a combination of both methods."—*Railroad Reorganization,* p. 351.

42 Cases are by no means uncommon in which a banker or syndicate guarantees the stockholders' assessments and an entirely different one buys a block of new first or general mortgage bonds. Such cases, however, inevitably

The compensation of the syndicate and its managers may consist of at least three different emoluments. It will be able to buy the new first or general mortgage bonds for less than the true market value, usually a discount of about 5 per cent. It will receive in addition a reasonable rate of interest and a commission on the actual money advanced during the reorganization.[44] It will also receive a considerable bonus in the form of new preferred[45]

lead to one banker or syndicate taking the lead, and analysis of the case will usually develop the fact that one of the bankers or syndicates is acting under the direction of the other.

[43] The Baltimore and Ohio Railroad reorganization of 1898 had a composite agreement of this character illustrative of the somewhat elaborate arrangements entered into between the general reorganization committee, acting for the new corporation, and the syndicate of bankers.
The syndicate agreed:

1. Guaranteed subscription to $6,975,000 new preferred stock and $30,250,000 new common stock, to be offered to the old first preferred, second preferred and common stockholders.
2. Agreed to purchase $9,000,000 prior lien 3½'s, due 1925; $12,450,000 first (general) mortgage 4's, due 1948; $16,450,000 4 per cent preferred stock.
3. Agreed "to protect the new company in the ownership and possession" of the property covered by its mortgages, by acquiring the old bonds, at par, from those who would not care to refund them into new bonds. The syndicate agreed to exchange such acquired old bonds for the corresponding amounts of new bonds specified in the plan.
4. Agreed to purchase $3,800,000 par value of Western Union Telegraph Company stock at $90 a share.—See *Chronicle,* vol. 66 (1898), p. 1,235; also Daggett, *Railroad Reorganization,* pp. 24 and 346.

[44] Sometimes—and the practice is growing quite common—the underwriting syndicate arranges with another syndicate of bankers to advance the necessary money. In the St. Louis and San Francisco reorganization of 1916, the ordinary underwriting syndicate, called in this case the Purchase Syndicate because it purchased outright a large block of prior lien bonds, made arrangements with the Loan Syndicate to carry its bonds. The compensation of the former was 4 per cent of the par value of the bonds, and of the latter approximately 2¾ per cent, both commissions being paid out of the assessments on the stockholders.

In the Pere Marquette reorganization of 1917 the Purchase Syndicate received a commission of 5 per cent on its entire obligation, out of which it compensated the Guaranty Trust Company of New York, which formed a Loan Syndicate, to carry the entire obligation of the Purchase Syndicate on a 20 per cent margin. The use of two syndicates, one to carry the risk and the other to advance the capital, seems to be growing in frequency.

[45] The syndicate which stood back of the Union Pacific reorganization received for its services $5,000,000 in preferred stock (valued at about 60 per cent) and the managing bankers $1,000,000. (Daggett, *Railroad Reorganization,* p. 253.) Such allotments of preferred stock are rare. Distinctly, the

or common stock,[46] or both. In addition, still, the rights of the non-assenting stockholders, which revert to the syndicate, may be looked upon as a fourth kind of compensation.[47] In general, the net amount of the special discount on the bonds and the commission on the money advanced may be looked upon as approximately equal to the direct and indirect expenses incurred by the syndicate. A profit can arise only through the development of a substantial value for the stocks received as a bonus. This can occur only if the reorganized company is a success. Obviously, therefore, the members of the underwriting syndicate must assume an active interest and directly coöperate in the future welfare of the road. This interest must, for selfish reasons alone, continue long after the reorganization plan has been consummated. Taking into account the risks both of money and business reputation which a reorganization syndicate assumes, the compensations given of late years are not exorbitant. They are, comparatively speaking, less than what affiliated bankers demand for the sale of the securities of solvent corporations, when the chance of loss is negligible; they are less, comparatively, than what receivers are accustomed to demand for purely nominal responsibilities involving no permanent risks.[48]

ARTHUR S. DEWING.

commonest form of bonus is a liberal issue of common stock alone without any preferred stock or bonds.

46 J. P. Morgan's banking house received $750,000 in common stock of the new Southern Railroad for the most difficult of Mr. Morgan's reorganizations. The stock had, at the time, little value.

47 In rare instances, the terms offered to purchase outright new securities are less favorable than those offered the old security holders directly. Thus, in the small, but notably unfortunate, Gulf, Florida and Alabama case the old bondholders were allowed to purchase, for $250 in money, $500 in prior lien bonds and $250 in second lien and common stock; whereas the syndicate members were given, for the same money price, $400 in the prior lien bonds and $150 in each of the junior securities.

48 For other discussions of the reorganization syndicate see Joline, *Reorganizations of Corporations*, p. 56; Daggett, *Railroad Reorganization*, p. 345; Meade, "The Reorganization of Railroads," *An. Am. Acad. Pol. Soc. Sci.*, vol. 17 (1901), p. 205.

COMMUNICATION

A further communication has been received from Mr. D. J. Tinnes, Hunter, N. D., in continuation of the discussion of definitions, which may be found on pages 335 and 585 of volume VIII (1918) of this REVIEW.

EXPERIMENTAL DEFINITIONS

WANTEDNESS, the quality of being wanted.

Not only is the term *utility* ambiguous, but the definitions commonly given it, "capable of satisfying a human want" and "must satisfy some human desire," seem hardly exact. For, surely, *wantedness,* rather than either *wantableness* or *attained satisfaction,* is the *demand* factor in *valure. Net wantedness* is marginal utility.

VALURE, trade-efficience or trade-worth (worth in trade), value in the economic sense.

The revival, for this restricted use, of the obsolete form *valure* will relieve an overworked term and make discussions of this subject clearer to the average reader. Derivatives: valural, valurable, valurate, valuration. *Purchasing power of money* is good, although *general* purchasing power may be taken to mean purchasing power *everywhere,* rather than purchasing power over all commodities. But *purchasing power* of a *commodity,* as signifying trade-efficience, not price, is less clear. Valure equally fits both uses.

PRICE, valure expressed in terms of money.

VALURAT (a correct form but no better than the less dignified *val*), a movable thing having value.

This definition excludes land, labor, and professional and personal services.

MONEY or CASH, currency issued by or authorized by the government.

This, with government paper and coins, takes in national bank notes.

CURRENCY, money plus deposit currency.

It seems absurd not to reckon as currency the freely circulating bank drafts and checks (money of private issue based on deposits), in which nine-tenths of the business of the country is transacted.

TRADE-CREDITS, all credits used as media of exchange, including book entries and all written and oral and even tacit agreements to pay in currency or in goods at currency prices.

It matters little whether trade credits are considered as augmenting the quantity or as increasing the turnover of currency. It seems simpler to view them as added quantity. For credit transactions are in no greater degree turnover of the paper currency in which they are reckoned than are trades effected with currency added turnover of the gold it represents. In gaging *valure* both equally represent the gold, yet the acceptability of neither is wholly derived therefrom.

D. J. TINNES.

REVIEWS AND NEW BOOKS

General Works, Theory and Its History

Instincts in Industry. A Study of Working-Class Psychology. By ORDWAY TEAD. (Boston: Houghton Mifflin Company. 1918. Pp. xv, 221. $1.40.)

Creative Impulse in Industry. By HELEN MAROT. (New York: E. P. Dutton and Company. 1918. Pp. xxii, 143. $1.50.)

It is necessary to keep in mind, in reading his book on *Instincts in Industry*, that Mr. Tead expressly disclaims precise classification of instincts. Nor does he assume that "the promptings of instinct offer a safe guide to conduct" (p. 6). He keeps in mind the need of experiment in trying out and testing the suggestions which he and others make as to the real importance of specified instincts (*e.g.*, p. 56). What he intends to do is simply to show by "a varied collection of facts, incidents, and anecdotes, that human conduct tends to become not only more intelligible but more amenable to control as we view it in the light of an understanding of the instinctive mainsprings of action" (p. ix).

These cautions are to be observed, because as Mr. Tead goes along in his discussion, it is seen that his starting point is the Freudian doctrine of explosion of the sex instinct when it has been suppressed, but he enlarges it into the explosion of other suppressed instincts. Furthermore, we know that from the time of Fourier anarchistic and socialistic doctrines have been based on the expected harmony that will follow the liberation of suppressed passions. Tead gives great weight to these doctrines of suppression and explosion, and indeed seems at times to overlook the equally important doctrines of necessary repression and control. It would be well if he would follow up this work by similar anecdotes and illustrations of the useful part played by the capitalist system in the line of discipline, management, control, and fulfilment of duty, promises, and agreements, even though by way of coercion. Something of this kind is needed to offset the chimerical conclusions likely to be drawn by those who see in that system only suppression and explosion and not the equally important discipline, obligation, credit, and good faith without which modern industry collapses altogether. I realize that what he is after is to suggest experiments towards obtaining a just balance between these two qualities of the capitalist system, but having left the latter half of the system undeveloped, the conclusions that might

be drawn seem to support schemes that experiments have already shown to be fatuous.

This, I take it, is the defect of Miss Marot's book. She starts with one of the so-called instincts, the instinct of workmanship. Then she has a plan for liberating it. Her plan is to start a kind of productive coöperation controlled by workmen, wherein they will be partners in the management, and thus will take part in the planning and so get vent for their instinct of workmanship. Robert Owen experimented with that plan a long time ago, and there were several Fourieristic experiments, and the history of coöperation is strewn with the wrecks of labor's participation in management. The capitalist system has evolved and survived out of experiments and in spite of continuous protests and opposition. And, I take it, one reason is that it is a system of repression of natural instincts, a system of discipline, regimentation, submission to foremen, superintendents, executives, over whom the employees have little or no control. Quite dependent on this is the fact that it is a system based on credit and the payment of debts, a system which could not be maintained if the workers had the power to pay to themselves the total product of their labor in present wages—a power which they always are inclined, even forced, to exercise by reason of their immediate necessities—instead of paying for upkeep and extensions out of present product. It is the business of management to sustain the credit system by restraining the instincts of labor.

Nevertheless, if capital and management overlook the suppression and explosion that Tead describes, the system will probably break down, and there are evidences that it is breaking down for this reason. Employers are losing their power of discipline, and the live question is, how are they going to retain enough of it to maintain the system. It is here that Tead's book ought to be of great value to capitalists, to engineers, scientific managers, executives and those who are inclined to sit on the lid. If they read it with due appreciation that it is an effort of one who has first-hand knowledge to help them arrange their thoughts and to try out experiments along really scientific lines, it will do them and the nation good in the doubtful times ahead. Tead definitely avoids conclusions that "pure instinct is ever in the saddle" (p. 9) and his definition of instinct as a born-disposition that is both variable and adaptive, permits him, through reference to imitation and habit, to combine the instincts in whatever arrangement seems

called for by his illustrations. The main object is to explain the activities and attitudes of manual workers without bringing in their reason or intellect. This is a considerable step in advance of the "calculating hedonism" of the classical and Austro-American economists, and if followed out in economic theory, it evidently shifts the crux of the subject from an abstract, subjective pleasure-pain psychology over to that point where psychology meets both jurisprudence and economics. Each is a theory of behavior-psychology, a theory of will-in-action; jurisprudence, of liberty and power to act; and economics, of action under conditions of limited opportunities to act.

It is this that gives significance to Tead's chapter on the "instinct of possession." For he finds that this instinct is not the hoarding instinct of squirrels and bees (p. 84) but the far more complex "sense of property right in jobs" (p. 70). In fact, taking his book as a whole, this is his central idea, clouded, however, by his concessions to the behavioristic psychologists who insist on pigeon-holing behavior according to the merely animal instincts. He recognizes that this cannot be done (pp. xii, xiii) and that all of the instincts are but expressions of the "instinct of self-preservation"— the "imperious will to live" (p. 18). This, in so far as it connects up with modern industry, is the "sense of property right in jobs," for the right to a job is not "physical or real property" (p. 67). It is a claim to a recognized position in that highly complex system of modern behavior, partaking of psychology, law, and economics, which we call "business."

When we analyze his various instincts, which are strictly instincts as found *in industry*, they focus around this sense of property right in jobs. Take his "instinct of workmanship." He describes it as "a delight in creation, or at least in activity to which some use is imputed." This "contriving impulse seems normally to manifest itself in conjunction with the possessive instinct." It may be, he says, that "the thwarting of the sense of proprietorship explains why the workmanly tendencies are not more active," etc. (p. 44). Likewise his "instinct of self-assertion." "In the money-economy under which we live . . . a situation has been created in which people desire to possess, not to satisfy so much the possessive as the self-assertive impulse" (p. 85). Also the "instinct of self-submission." "Many people seem to derive a downright pleasure from being bossed" (p. 113). Yet if this instinct is born of "fear" rather than "admiration" (p. 114) it is liable to end in

an explosion on the job (p. 129). Again, the "sex instinct," "the classic truth that woman's beauty arouses the interest and attention of man, is capitalized in business in all sorts of ways" (p. 36). The "parental instinct"—"those who marry and have children, or those who intend to marry, are declaring in one way or another an imperious determination to provide decently for their own" (p. 33). "Pugnacity is provoked by assertion of claims to jobs." Lastly, the "instinct of curiosity." It seems to be "the function of thought" (p. 200), "the human being's native desire to be intellectual master of his fate." It underlies ambition, promotion in jobs, class consciousness, wage consciousness and similar collective claims to jobs.

Centering, as these instincts do, in his mind, around the perfect instinct, or the undifferentiated instinct of self-preservation, I believe Tead's practical conclusions would come with more weight if the whole arrangement of his book had been centered around that instinct. As it is, we have unorganized anecdotes and illustrations, leading up to rather commonplace conclusions, such as, "human nature is knowable, subject to law, controllable, and needs a considerable measure of democracy and self direction" (p. 220).

Apart from the coöperative experiment which she proposes, Miss Marot's book is a notable product of the recent unrest in industry, education, and organized labor. Her "creative impulse" is not exactly an instinct but a result of education, and both industry and our school system suppress it. She surveys education from the standpoint of John Dewey, industry from the standpoint of Robert Wolf, and organized labor from the standpoint of control of the shop. "The creative process is the educative process, or, as Professor Dewey states it, the educative process is the process of growth" (p. xxi). "It is beginning to be understood," says Wolf, "that when we deny to vast numbers of individuals the opportunity to do creative work, we are violating a great universal law" (p. 39).

The labor movement heretofore has been a business movement (p. 10). The object has been financial, that is, getting wealth by "capture," not by work (p. 14). In so far as possible, both capital and organized labor have "exploited wealth" rather than produced it (p. 63). Miss Marot finds traces of a new motive. "The syndicalism of France has expressed the workers' interest in production as the labor movements of other countries have laid stress exclusively on its economic value to them" (p. 10). Next, the

"shop stewards'" movement of England "is essentially an effort of the men in the workshops to assume responsibility in industrial reconstruction after the war, a responsibility which they have heretofore under all circumstances delegated to representatives not connected directly with the work in the shops" (p. 62).

It is in the revolt of organized labor against their trade-union leaders, the revolt of socialists against the "bureaucratic schemes of state socialism, the revolt against the "autocratic method of business management," all of them signifying effort of workers in the shop to get control of the shop, that Miss Marot finds the urge of the creative impulse in the workers themselves. It is not merely an effort, as has been supposed, to get more wages or get control of the jobs; it is an effort, or at least the unwitting first push of an effort, to get back to the spirit of craftsmanship and workmanship. In order that workers may have an interest in their work they must have responsibility in its planning. "For this reason we need to develop the opportunity as well as the desire for responsibility among the common people" (p. 67).

Miss Marot has furnished many persuasive facts and arguments to sustain her proposition. She has, moreover, worked out a scheme for its practical application. But the scheme impresses me far more as a suggestive plan to be taken up and experimented on by employment managers and labor departments in factories than as a plan to be launched independently. Business, of course, has to be made financially successful, and that requires salesmanship as well as the creative impulse of the workers. The labor revolt that she emphasizes is compelling capitalists to pay attention to this very defect in industry and to separate labor management from engineering, salesmanship and finance. Welfare schemes have been their first approach, then scientific management. These fall short of meeting the workers half way, and Miss Marot's book sets forth the next line of experiments which, it seems certain, they must make not only in industry and education but also in the organization of labor.

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L'Economie Politique et les Economistes. By Gustave Schelle. Encyclopédie Scientifique, published under the direction of Dr. Toulouse. (Paris: Doin et Fils. 1917. Pp. xviii, 396. 6 fr.)

The author endeavors to present in outline a sketch of the na-

ture and history of economic thought. He proceeds from a point of view of the French Liberal School; defines economics as the science of exchanges; and goes pretty far toward stating that economics, as a science, began and ended with J. B. Say. At the end of that writer's work, M. Schelle states, most of the consequences of the law of supply and demand had been illuminated, and economists were in accord as to the nature of value and as to the distinction between value and utility. Say, too, had demonstrated that immaterial products are not different, from the point of view of economics, from material products; and he had established the theory of markets, thus placing upon a permanent basis the doctrine of freedom of exchange. "All that which concerns the formation of capital, revenues, and profits; role of money, both metallic and credit; taxation; and consumption of wealth, formed a whole to which in the future it would be possible to add only details. The distribution of wealth alone contains problems which might trouble the economist" (p. 182).

One's first impression upon glancing through the book is the lack of balance in the treatment of the different authors. In reality, the book should be called A History of Political Economy in France, with Notes on Foreign Influences. German economists are conspicuous by their absence. For example, hardly a page is given to the German Historical School, which is dismissed as being founded on a confusion between the science and art; nor do the leaders of English economic thought fare much better. Ricardo receives somewhat cavalier treatment in three pages; Cairnes is not referred to; and Jevons is barely mentioned as a statistician, and as a member of the "socialists of the chair"! The reviewer finds no mention of Francis A. Walker, Von Wieser, or L. Cossa. The bibliography consists entirely of French works, with one exception, which has been translated into French from Italian.

A characteristic of French economic thought is noticeable in the shape of the large amount of attention paid to socialism. Approximately 110 pages are devoted to various lines of socialist thought. Indeed, the classification of socialist tendencies is of some interest, embracing the utopists (More to Brissot); sentimental socialism (St. Simon, Fourier, and others); pseudo-scientific (Marx), etc.; political socialism (solidarism, interventionism, coöperation, etc.); and "l'étatisme" (public ownership). The author goes too far in confusing socialism of the chair with Marxian socialism, and shows his lack of understanding of the

subject by only mentioning, as members of the school, Wagner, Jevons, and Laveleye.

The discussion of the physiocrats and Turgot (to whom a separate chapter is given) will be found one of the most useful parts of the book. Other noteworthy, though questionable, features are the separate chapters on mercantilism, Colbertism, and the "law-of-nature economists"; and the chapter on positivists, treating of Comte, "Stuart Mill," and Herbert Spencer. There is a short chapter on the history of statistics.

The book contributes little if any that is new, but is interesting for its method of presentation and point of view.

LEWIS H. HANEY.

Washington, D. C.

NEW BOOKS

BROWN, J. F. *New era economics; presenting a rational theory of value.* (Indianapolis: The author, 529 E. New York St. 1918. Pp. 184. $1.)

CARVER, T. N. *Principles of political economy.* (Boston: Ginn. 1918. Pp. 588. $1.96.)

To be reviewed.

COLSON, C. *Cours d'économie politique.* (Paris: Gauthier-Villars. Pp. 547; 531; 456. 1915; 1917; 1918.)

The first volume is devoted to economic theories; the second, to the movement of population, employment conditions, and social legislation; and the third includes an inventory of the wealth of France before the war as compared with England and Germany, also an estimate of the cost of the war.

DETILLIEUX, A. *La philosophie sociale de M. Ernest Solvay.* (Paris: L. Lebègue et Cie. 1918. 1.50 fr.)

GIDE, C. *Cours d'économie politique.* Fourth edition, revised. (Paris: Tenin. 1919. 12.50 fr.)

HETHERINGTON, H. J., and MUIRHEAD, J. H. *Social purpose; a contribution to a philosophy of civic society.* (New York: Macmillan. 1918. Pp. 317. $3.50.)

KIEKHOFER, W. H. *An outline of the elements of economics.* Second edition, revised. (Madison: Dept. of Economics, Univ. Wisconsin. 1918. Pp. 142.)

SEGAL, H. *The law of struggle.* (New York: Massada Pub. Co. 1918. Pp. 161. $1.50.)

The author of this volume, like so many other philosophers, attempts to interpret all things in the terms of a single word or phrase, this time in the terms of pain and struggle. In the chapter

on The Economic Struggle, a system of privately owned and state regulated monopolies together with profit-sharing is advocated.

G. L. A.

SPRINGER, L. *Some aspects of financial and commercial after-war conditions.* (London: King. 1919. 2s. 6d.)

THOMPSON, C. M. and HUNTER, M. H. *Exercises and problems in economics.* (Chicago: Sanborn. 1919. Pp. 87.)

Prepared for use with Thompson's *Elementary Economics.* The exercises and problems are divided into three groups. Group A calls for knowledge of textbook facts; group B for investigation and observation; group C requires simple, deductive reasoning.

TRAVERS-BORGSTROEM, A. *Mutualism, a synthesis.* (Switzerland: Clarens. 1918. Pp. 76.)

TURNER, J. R. *Introduction to economics.* (New York: Scribners. 1919.)

Economic History and Geography

Readings in Industrial Society. A Study in the Structure and Functioning of Modern Economic Organization. By LEON CARROLL MARSHALL. (Chicago: University of Chicago Press. 1918. Pp. xxiv, 1082. $3.50.)

Professor Marshall's book of readings is a bulky volume of nearly 1100 closely printed pages. The first 221 of these are devoted to providing a "historical background" for the "outstanding features of modern industrial society," which are taken up in the remaining pages. The book is one of the Chicago "case book" series, which series differs from the Harvard group of case books in that the method is to present a multitude of small fragments, grouped under certain main heads. On the whole it may be said that the numerous subjects covered are brought before the reader with a recognition of their social significance, and with the idea of a social appraisal. The book ends with a long chapter on Social Control. In the reviewer's opinion, however, there is a slant towards optimism.

Professor Marshall's work has been very well done. There are not a few shortcomings, but these are chiefly inherent in the method. In fact, the reviewer is very doubtful whether such books of readings as this are worth while. The small fragments torn out of their settings in numerous works are so difficult to coördinate, and each is necessarily so unfinal, that it is almost an impossible task to weave them into a real whole. (An index would have helped.) Moreover, there is a necessary tendency to lead the

reader to regard the book as covering the whole field, for such a purpose is apparent. Nevertheless in the present work there is practically nothing on transportation and communication, on agriculture, or on trade union organization and policy. Also the great number of short quotations on the same subject leads one to expect that all sides of the subject will be presented. As a matter of fact, one finds that on the moot point of maintenance of resale prices, the present work gives quotations from a paper by Professor Cherington and an argument by the National Chamber of Commerce, both advocates of the system. Also what seems to the reviewer the erroneous inclusion of "price agreements," under the head of Pools, by Dr. W. H. S. Stevens, is inserted without modification.

Doubtless it would be impossible to prepare a work like this to which someone would not object that certain authors had been quoted who were relatively unimportant; and that others more important had been omitted. Nevertheless, the reviewer would ask why Professor Marshall quotes from W. H. Hamilton on such subjects as Business Cycles, The Case for Private Property, Role of Money, and The Industrial Revolution? Why F. M. Taylor on Stock Exchanges? Why *only* J. B. Clark and J. M. Clark on the functions of the Entrepreneur? Why is no reference made to the Johns Hopkins University studies in trade unionism? Why no adequate utilization of the reports made by the Bureau of Corporations and the Federal Trade Commission? Why no quotation giving Walker's theory of profits? Why no quotations from Mill and Jevons under the head of The Relation of Government to Industrial Activity?

Perhaps these queries but reflect the necessary weaknesses of a book of this sort. In any event it should be noted that there are many interesting fragments contained therein; *e.g.*, some from H. C. Adams, Carver, Seligman, Hobson, the Industrial Commission, and others.

The book will be useful to the economist who desires to look up a given point. No doubt the plan has been found workable at the University of Chicago; but it has been the reviewer's experience, as a teacher, that the selections are too fragmentary to be useful as outside readings.

Such works remind one of the quick lunch counter or cafeteria. An attractive, though somewhat motley, arrangement of dishes is displayed; but the meal is not of the most pleasant or nourish-

ing kind, and one arises from it with a feeling of dissatisfaction and a longing for a "regular" meal.

LEWIS H. HANEY.

NEW BOOKS

ABBOTT, E. *Democracy and social progress in England.* (Chicago: Univ. Chicago Press. 1918. Pp. 17.)

BACHI, R. *L'Italia economica nel 1917. Le ripercussioni della guerra mondiale ed italiana sull' economia nazionale.* (Turin: La Riforma Sociale. 1918. Pp. xvi, 312.)

BARRON, C. W. *War finance as viewed from the roof of the world in Switzerland.* (Boston: Houghton Mifflin. 1919. Pp. xii, 368. $1.50.)

This volume is based upon a three months' personal visit of investigation in England, France, and Switzerland in the summer of 1918. From a previous study the author found the same problems of interrelated war and finance in Mexico as in Europe. He now sees the "international unfolding of the larger problem of brotherhood of man—brotherhood in war and in peace, brotherhood in trade and in finance." Letter 12 deals with costs of war and indemnification; letter 14 with American railroads in France; letter 22 with taxes and injustice; letter 34 with free trade and protection. The volume is stimulating and contains a great variety of first-hand data. It stresses interdependence in national problems.

BEVAN, E. *German social democracy during the war.* (London: Allen. 1918. Pp. 280.)

BOND, B. W., JR. *The quit-rent system in the American colonies.* (New Haven: Yale Univ. Press. 1919. $3.)

CALHOUN, A. W. *A social history of the American family from colonial times to the present.* Vol. III. *Since the Civil War.* (Cleveland: Arthur H. Clark Co. 1919. Pp. 332; 411. $5.)

This final volume of Dr. Calhoun's study deals with the American family in the last half century and discusses such matters as the changed social conditions in the South, the revolution in woman's world, alterations in home life, race sterility and race suicide, divorce, and attitude of the church.

Dr. Calhoun considers that urban industrialism is the one fundamental economic fact that has shaped the evolution of the American family since the Civil War, and that it is the taproot of the evils undermining the home and family. He shows how the relentless workings of the profit system develop a far-reaching pathology of their own which has a demoralizing influence on rich and poor, on city and country. Such problems as child labor, congested tenement and alley life, the social backwardness of the negro, are "a part of the larger problem of the capitalist system," and must wait for their elimination "on the attainment of economic leeway." In con-

nection with bad housing conditions, the author observes that current capitalism seems willing to try the experiment of a civilization without homes (p. 75), though people can neither be moral nor healthy until they have decent homes. Individuals not families are now the units of society; and the only way to reintegrate the family (if it is possible) is by readjusting our economic system, by abolishing economic exploitation (p. 274). But this is the dark side of the picture. Equal emphasis is placed on the social gains of the last fifty years, particularly in regard to the position of women and the care of children.

Dr. Calhoun believes the indications are that society is working toward socialism, not as a final goal but as the next stage in social evolution (p. 326), and that the promise of American life is a new family "based on the conservation and scientific administration of limited natural resources, on the social ownership of the instrumentalities of economic production and the universal enjoyments of the fruits, and on a social democracy devoid of artificial stratification based on economic exploitation" (p. 332).

The book contains considerable economic data regarding housing conditions, child labor, and women in industry.

AMELIA C. FORD.

COGHLAN, T. A. *Labor and industry in Australia; from the first settlement in 1788 to the establishment of the commonwealth in 1901.* Four volumes. (New York: Oxford Univ. Press. 1918. Pp. 2450. $33.)

DORGAN, M. B. *Lawrence, yesterday and to-day (1845-1918).* (Lawrence, Mass.: M. B. Dorgan, City Hall. 1918. Pp. 263. $1.50.)

FISHER, E. F. *Resources and industries of the United States.* (Boston: Ginn. 1918. Pp. 246. 80c.)

GANNON, F. A. *The ways of a worker of a century ago as shown by the diary of Joseph Lye, shoemaker.* (Salem, Mass.: Newcomb & Gauss. 1918. 25c.)

HARLOW, R. V. *Economic conditions in Massachusetts during the Civil War.* Publications of the Colonial Society of Massachusetts, vol. XX. (Boston: The author, Simmons College. 1918.)

HIMES, C. F. *Life and times of Judge Thomas Cooper.* (Carlisle, Pa.: The author. Pp. 70.)

HOBSON, J. A. *Richard Cobden; the international man.* (New York: Holt. 1919. Pp. 416. 5s.)

HOFFMAN, F. L. *Autocracy and paternalism vs. democracy and liberty. An address delivered at the annual meeting of the International Association of Casualty and Surety Underwriters, December 4, 1918.* (Newark, N. J.: The author, Prudential Ins. Co. 1918. Pp. 32.)

HOPKINSON, A. *Rebuilding Britain; a survey of problems of reconstruction after the world war.* (London: Cassell. 1918. Pp. 186.)

Huntington, E. *World-power and evolution.* (New Haven: Yale Univ. Press. 1919. Pp. 287. $2.50.)

Jauréguy, P. *L'industrie allemande et la guerre.* (Paris: Dunod & Pinat. Pp. 160).

Lippincott, I. *Problems of reconstruction.* (New York: Macmillan. 1919. Pp. 340. $1.60.)

McKitrick, R. *The public land system of Texas, 1823-1910.* University of Wisconsin, bull. no. 905. Economics and political science series, vol. 9, no. 1. (Madison: Univ. Wisconsin. 1918. Pp. 172. 25c.)

Munro, W. B. *The government of the United States, national, state, and local.* (New York: Macmillan. 1919. Pp. x, 648. $2.75.)

Contains chapters on the taxing power (pp. 219-232); the borrowing power, the national debt, and the national banking system (pp. 233-245); the power to regulate commerce (pp. 246-264); the workings of congressional government, with special reference to congressional finance (pp. 299-311); and state finance (pp. 460-472).

Overlach, T. W. *Foreign financial control in China.* (New York: Macmillan. 1919. Pp. ix, xiii, 295. $2.)

To be reviewed.

Parkins, A. E. *The historical geography of Detroit.* University series, III. (Lansing: Michigan Historical Commission. 1918. Pp. xix, 356.)

Peddie, J. T. *Economic reconstruction.* (New York: Longmans. 1918. Pp. vii, 242. 6s. 6d.)

Reckitt, M. B. and Bechoffer, C. E. *The meaning of national guilds.* (New York: Macmillan. 1919.)

Reese, A. M. *Economic zoölogy.* (Philadelphia: P. Blakiston's Son & Co. 1919. Pp. xvii, 316.)

Riu y Periquet, D. *Anuario financiero y de Sociedades anónimas de Espana.* (Madrid: Imprenta Sáez. 1918. Pp. 791. 13 p.)

Ruiz Moreno, I. *El impuesto sobre la renta. Su aplicación en la República argentina.* (Buenos-Aires: Rosso. 1918. Pp. 79.)

Samuel, A. M. *The herring, its effect on the history of Britain.* (London: Murray. 1918. Pp. xx, 199.)

Schafer, J. *A history of the Pacific Northwest.* (New York: Macmillan. 1918. Pp. 323.)

First published in 1905. Contains chapters on the fur trade on the Columbia, the Hudson Bay Company, the age of railways, the progress of agriculture, and industry and commerce.

Shortt, A. and Rowe, L. S. *Early economic effects of the European war upon Canada. Early effects of the European war upon the*

finance, commerce and industry of Chile. (New York: Oxford Univ. Press. 1918. Pp. xvi, 101. $1.)

SPRINGER, L. *Some aspects of financial and commercial after-war conditions.* (London: King. 1918. 2s. 6d.)

TREXLER, H. A. *Flour and wheat in the Montana gold camps, 1862-1870: a chapter in pioneer experiences and a brief discussion of the economy of Montana in the mining days.* (Missoula, Mont.: Dunstan Prtg. Co. Pp. 20.)

WERNER, C. J. *A history and description of the manufacture and mining of salt in New York State.* (Huntington, N. Y.: The author. 1919. Pp. 144.)

WITHERS, H. *The league of nations; its economic aspect.* (New York: Oxford Univ. 1918. Pp. 16. 12c.)

The American year book; a record of events and progress, 1918. Edited by F. G. WICKWARE. (New York: Appleton. 1919. Pp. 850. $3.50.)

The following chapters are included: XII, Economic conditions and the conduct of business, by S. S. Huebner; Economics, by W. C. Mitchell. XIII, Public finance, banking, and insurance, by C. C. Williamson, Ray B. Westerfield, W. M. Strong, and S. S. Huebner. XIV, Social and economic problems: Sociology, by H. N. Shenton; Social work and the war, by W. T. Cross; Recreation, by H. P. Moore; Child welfare, by L. A. Thompson; Social hygiene, by W. Clark; Criminology and penology, by E. R. Cass; The liquor problem, by J. Koren; Socialism, by C. D. Thompson; Vocational education and guidance, by A. R. Dean; Unemployment, by J. B. Andrews; XV, Labor and labor legislation, by J. B. and I. O. Andrews. XIX, Trade, transportation and communication, by G. G. Huebner and R. Riegel.

Anuario technico e industrial de Espana. (Madrid: Imp. de Antonio Marzo. 1918.)

L'avenir de l'expansion économique de la France. (Paris: Giard & Brière. 1918. 14 fr.)

Canada's war effort, 1914-1918. (Ottawa: Director of Public Information. 1918. Pp. 31.)

A catalogue of French economic documents from the sixteenth, seventeenth, and eighteenth centuries. (Chicago: The John Crerar Library. 1918. Pp. 8, 104. 20c.)

The Garton Foundation memorandum on the industrial situation after the war. Revised and enlarged edition. (London: Harrison & Sons. 1919. 2s.)

List of references on reconstruction. Reference circular no. 5. (Indianapolis: Indiana State Library. Pp. 17.)

Memorandum on the industrial situation after the war. (Philadelphia:

U.S. Shipping Board Emergency Fleet Corporation. 1919. Pp. 76.)

Problems of industrial readjustment in the United States. Research report no. 15. (Boston: National Industrial Conference Board. 1919. Pp. 58. $1.)

Reconstruction programs: a bibliography and digest. Reconstruction series, bull. no. 2. (New York: Joint Commission on Social Service of the Protestant Episcopal Church. 1919. Pp. 20.)

Report of the Indian Industrial Commission under the chairmanship of Sir Thomas Holland, K.C.S.I. (Madras: G. A. Natesan Co. 1919. Pp. 272. 1 rupee.)

St. Louis after the war. (St. Louis: City Plan Commission. 1918. Pp. 31.)

Taking stock of the future. Outlines of the plans of various foreign countries for commercial reconstruction. (New York: Guaranty Trust Co. 1918. Pp. 162.)

Agriculture, Mining, Forestry, and Fisheries

The Food Crisis and Americanism. By William Stull. (New York: The Macmillan Company. 1919. Pp. viii, 135. $1.25.)

The author, so we are informed in the preface, went from the farm to a four-years' course in "one of the best agricultural universities, specializing in mathematics and agricultural chemistry," thence (apparently about 1878) to a position as representative of a farm mortgage company, and has followed this work ever since. He may therefore be expected to speak *ex cathedra* upon the ills of the American farmer. He believes that "the most serious and one of the most pressing questions of today is: What is the matter with American agriculture, that it is breaking down at the most critical period in the nation's history?" And to this question he replies: "Labor and marketing conditions are responsible for the present deplorable situation. These have grown out of the two basic evils: the one, that we have exalted idleness; the other, that we, as a people, have become over-commercialized." As a matter of fact, the author explores a much wider field of causation than that indicated in the quotation, but does not go very deeply into even the main points of this indictment.

It is asserted that our system of education "engenders an indifference to, if not a contempt for, labor—or at least a feeling that manual labor is very disagreeable, if not degrading." This is linked with the inordinate wages of union labor, to explain a

fatal shortage of farm help. The remedy suggested is that organized labor abandon the eight-hour day and that we set aside or at least mitigate our Chinese exclusion laws. The first "would release one in five of the number [of industrial workers] to be employed in agriculture, or to take the place of those less skilled, who would in turn be released for farm labor. . . . One Chinaman added to the present force on each farm would, at the end of the second year, add 25 per cent to 40 per cent to the present output, and soon increase this to 100 per cent." While these steps are urged as war measures (the book, though published in February, 1919, retains unaltered the point of view of July, 1918, when the preface was written), there is nothing to soften the implication that these measures would be effective in their action and proportionately desirable for the meeting of any less exigent food crisis of peace times. Next the Food Administration (Mr. Hoover excepted) is criticized for following a course which has forced on the producer "a constant loss, since November 1, 1917, averaging over 20 per cent on all hogs sold," and at least nearly equal injustice to the cattleman. Following this, a few bitter words on the public land policy serve to preface a sweeping denunciation of the federal land banks.

It might seem, now that the author is upon his own ground, that we should have more detailed analysis of the issue involved. However, only ten pages are devoted to this discussion and the argument confines itself to generalities and is extremely biased in its character. The main point is that the farm mortgage companies were given practically no part in the framing of the law, that the business can be handled much more cheaply by private agencies, and that it should be turned back to them at the earliest possible moment. "One's head swims," says the author, "when he attempts to compute the amount of this unnecessary burden, when, as they anticipate, the federal land banks shall have placed upon its books $4,000,000,000 in farm mortgages." The reader can hardly avoid the feeling, as he notes the amazing statements in this discussion, that the author's head did, in truth, swim as he wrote.

The remainder of the book deals with the birth of class consciousness among American farmers, their increasing poverty and mortgage indebtedness, the evils of land speculation, the lack of adequate crop news, the need of developing water transportation, and the sins of the railroads, the packers, and other monopolies, with lengthy *obiter dicta* upon theories of soil fertility and the short-comings of the Federal Bureau of Soils.

There is sound wisdom in the fundamental idea which lies back of this book. It seeks to point out the lack of intelligent and sympathetic interest on the part of the public and of legislatures with reference to our great fundamental industry, agriculture. That the author himself is intelligent and sympathetic with regard to the farmer's needs, at times seems somewhat doubtful when we find him scouting the idea that there has been any scarcity of capital available for the farmer and when we find him advocating a plan by which the farm worker will be thrown into competition with the lowest grades of coolie and other immigrant labor. Throughout, the author proves too much; his attitude toward facts is far from scholarly, and his handling of figures is at best extremely reckless. What, for example, is the truth back of the assertion "it has for years been utterly impossible to secure more than half the necessary farm labor at any price" or "the chief opposition to Chinese labor comes from 'idlers' and organized labor" or "the farmers have received no profit on hog-feeding during the war" or "in no country in Europe, during the last two decades, have the farmers received so little for their produce and the consumer paid so much for their foodstuffs as in this country." Assuredly we need and would welcome a careful and authentic study of any one of the issues raised in this small volume, particularly that dealing with the agricultural labor supply and its efficient use, or with the actual results of food control, or the present status of rural mortgage credit. But a brief discursive treatment of a wide range of these problems within so small a compass and by one not particularly qualified for the task merely muddies the waters of a pool that was already turbid enough.

E. G. Nourse.

Iowa State College.

NEW BOOKS

Arnold, J. H. *A study of farming in southwestern Kentucky.* (Washington: Dept. Agriculture. 1918. Pp. 19.)

Bosworth, G. F. *Agriculture and the land.* (Cambridge, Eng.: University Press. 1917. Pp. vii, 93.)

Brooke, W. E., editor. *The agricultural papers of George Washington.* Studies in American history. (Boston: Badger. 1919. Pp. 145. $1.50.)

Christie, G. I. *Finding labor to harvest the food crops.* (Washington: Dept. Agriculture. 1918. Pp. 8.)

Coffey, W. C. *Productive sheep husbandry.* (Philadelphia: Lippincott. 1918. Pp. x, 479.)

ESCARD, J. *L'aluminium dans l'industrie. Métal pur, alliages d'aluminium.* (Paris: Dunod & Pinat. 1918.)

HARDER, E. C. and JOHNSTON, A. W. *Preliminary report on the geology of East Central Minnesota including the Cuyuna iron-ore district.* (Minneapolis: Univ. Minnesota. 1918. Pp. vi, 178.)

HARRIS, F. S. *The sugar-beet in America.* (New York: Macmillan. 1919. Pp. 342. $2.25.)

Professor Harris, director and agronomist of the Utah Agricultural Experiment Station, has written this book primarily for farmers who are raising beets, for agriculturalists of sugar companies, and for use as a text in agricultural colleges. After a very brief historical introduction, most of the text is devoted to sugar-beet culture. In the closing part of the volume is a brief chapter on each of the following subjects: Beet raising and community welfare; Sugar-making; Sugar-cane; World's use and supply of sugar. The appendix contains a good bibliography and statistics of beet-sugar companies and factories in the United States as well as statistics of sugar production throughout the world. The work is profusely illustrated and contains many excellent diagrams, charts, and maps. It is written in simple non-technical language and seems well adapted to present the fundamentals of beet culture to those for whom it is intended. ROY G. BLAKEY.

HOUSTON, D. F. *Today and tomorrow in American agriculture. Remarks of the Secretary of Agriculture before the Association of American Agricultural Colleges and Experiment Stations, at Baltimore, Md., January 8, 1919.* (Washington: Supt. Docs. 1919. Pp. 11.)

MOOREHOUSE, L. A. and others. *Farm practice in growing sugar beets in three districts in Colorado, 1914-15.* Department bull. 726. (Washington: Dept. Agriculture. 1919. 10c.)

PORTER, J. *The farm and the nation.* (High Town, Hereford, Eng.: Jakeman & Carver. 1918. Pp. 32.)

PRESCOTT, S. C. *Relation of dehydration to agriculture. Address before the National Association of Commissioners of Agriculture at Baltimore, January 7, 1919.* (Washington: Dept. Agriculture. 1919. Pp. 10.)

ROUSH, G. A., editor. *The mineral industry; its statistics, technology, and trade during 1917.* Vol. 26, supplementing vols. 1-25. (New York: McGraw-Hill. 1918. Pp. xviii, 928.)

TOWNSEND, C. O. *The beet sugar industry in the United States.* Department bull. 721. (Washington: Dept. Agriculture. 1918. Pp. 56.)

WRIGHT, C. A. *Mining and milling of lead and zinc ores in the Missouri-Kansas-Oklahoma zinc district.* Bureau of Mines bull. 154. (Washington: Supt. Docs. 1918. Pp. viii, 134. 30c.)

ZAPOLEON, L. B. *Geographical phases of farm prices: corn.* U.S. Dept. of Agriculture bull. (Washington: Supt. Docs. 1918. Pp. 53.)

ZUJOVIC, J. M. *Le sol et la situation agraire dans les pays serbo-croates et slovènes.* (Paris: Bibliothèque de la Yougo-Slavie, 118 rue d'Assas. 1918. Pp. 80.)

Coal Conservation Committee final report. Ministry of Reconstruction. (London: Wyman. 1919. Pp. 89. 1s.)

Cotton facts. Edition of 1918. (New York: Shepperson Pub. Co. 1918. $1.)

The farmers' elevator movement in Ohio. (Wooster: Ohio Agricultural Experiment Station. 1918. Pp. 25.)

The farm market. (Philadelphia: Curtis Pub. Co. 1918. Pp. 68.)

Summarizes information obtained by the Curtis Publishing Company as a result of a survey of the farming industry. Many striking diagrams, showing value of farm property, farm output, value of crop, size of farms, farm indebtedness, etc., are included.

Report of Agricultural Commission to Europe. Observations made by American agriculturists in Great Britain, France, and Italy for the United States Department of Agriculture. (Washington: Dept. Agriculture. 1919. Pp. 89.)

Work and expenditures of the agricultural experiment stations, 1917. Part I of report on experiment stations and extension work in the United States, 1917. (Washington: Supt. Docs. 1918. Pp. 335.)

Manufacturing Industries

NEW BOOKS

GRANDMOUGIN, E. *La réorganisation de l'industrie chimique en France.* (Paris: Dunod & Pinat. 1918. Pp. xi, 277.)

KELLY, R. W. and ALLEN, F. J. *The shipbuilding industry.* (Boston: Houghton Mifflin. 1918. Pp. xix, 302. $3.00.)

This is a technical description of the industry, with a brief summary of the history and economics of the business. It has been written in close coöperation with those engaged in the shipbuilding industry. There are over one hundred illustrations, and appendices containing a bibliography, glossary of terms, and wage scales.

KISSELL, M. L. *Yarn and cloth making. An economic study.* (New York: Macmillan. 1918. Pp. 252. $1.50.)

LE CHATELIER, L. *Metallurgie d'hier et de demain.* (Paris: Letouzey. 1919.)

Armour and Company, 1919. (Chicago: Armour & Co. 1919. Pp. 28.)

Clark's directory of Southern textile mills. Does not include silk mills, woolen mills, or batting mills, except those that spin cotton.

Fourteenth edition. (Charlotte, N.C.: Clark Pub. Co. 1918. Pp. 176. $1.50.)

Power development in Alabama. Description of the system of the Alabama Power Company, including the water power development at lock twelve on the Coosa River. (Birmingham: Alabama Power Co. 1918.)

Swift and Company year book, 1919. (Chicago: Swift & Co. 1919. Pp. 58.)

Transportation and Communication

NEW BOOKS

BENEDICT, B. *Express companies in the United States.* (New York: International Socialist Society, 70 Fifth Ave. 1919. 10c.)

LEIGH, E. B. *Railway buying and industrial readjustment. An address before the National Industrial Conference Board, February 20, 1919.* (Chicago: The author, 1928 West 46th St. 1919. Pp. 11.)

MORAWETZ, V. *Solution of the railway problem. Outline of plan.* (New York: The author, 44 Wall St. 1919.)

MUNDY, F. W., compiler. *The earning power of railroads, 1918-19; mileage, capitalization, bonded indebtedness, earnings, operating expenses, cost of maintenance, fixed charges, comparative statistics, investments, dividends, guarantees, etc.* (New York: J. H. Oliphant & Co., 61 Broadway. Pp. 422. $3.)

ROBERTS, M. G. *Federal liabilities of carriers.* (Chicago: Callaghan. 1918. Pp. 3031. $15.)

WARBURG, P. M. *A suggestion of the main principles on which the solution of the railroad problem should be sought.* (New York: The author, 11 East 80th St. 1919. Pp. 36.)

Conditions for transportation progress. Report of the Railway Business Association committee on railways after the war. (New York: F. W. Noxon, Sec'y, 30 Church St. 1919. Pp. 16.)

A list of references to the more important books and articles on government control and operation of railroads. (Washington: Bureau of Railway Economics. 1919.)

Remedial railroad legislation, 1919. Preliminary edition. *Supplement.* (New York: Association of Railway Executives, 61 Broadway. 1919. Pp. 279; 98.)

The traffic field. (Chicago: LaSalle Exten. Univ. 1919. Pp. xv, 298.)

Five authors are responsible for the different parts of this volume. The industrial traffic department, by J. W. Cobey; Associated traffic management, by Brunner Robeson; Community traffic management, by L. P. Haynes; Public utility commission work, by J. H. Kane; Railway traffic management, by N. D. Chapin. The volume is of practical service for those engaged in transportation. There are many charts and diagrams.

Trade, Commerce, and Commercial Crises

NEW BOOKS

BEABLE, W. H. *Commercial Russia.* (New York: Macmillan. 1919. Pp. 278. $3.)

CLERGET, P. *La technique de l'exportation.* New edition. (Paris: Colin. 1919.)

CULBERTSON, W. S. *Commercial policy in war time and after.* (New York: Appleton. 1919. $2.)

DOUGLAS, A. W. *Merchandising.* (New York: Macmillan. 1918. Pp. 151. $1.)

Merchandising reflects the author's forty years' experience with a large hardware distributing house in the Middle West. Although the chapters upon selling are not all grouped together and although care of stock and turnover of stock precede ordering, the general arrangement of the work is not illogical. In taking up the subject of buying, Mr. Douglas, after emphasizing the purchase of goods as the basis of merchandising policy, considers the process of ordering, devoting separate chapters to regular goods, seasonable goods, and holiday goods. In the discussion of selling, Mr. Douglas merely indicates the scope of the subject, reserving fuller treatment to another work. Advertising and distribution come in each for a chapter; likewise, credit and collections. The book closes with a brief discussion of the human equation.

The merit of the work, brief as it is, lies in the attention given to matters which are important for the practical operation of merchandising, but which are often neglected in more theoretical or more general discussions of the subject. Many of the illustrations given indicate the character of the business in which the author was engaded. As a whole, the work is an addition to our present merchandising literature. However, we should appreciate very much a work the size of which did not so restrict Mr. Douglas to general statements—statements which we feel are true but which we should like to have illustrated from his fund of valuable experience.

H. R. TOSDAL.

HERUBEL, M. *L'exportation des vins.* (Paris: L'Association Nationale d'Expansion Economique. 1918.)

RAWLLEY, R. C. *The silk industry and trade.* (London: King. 1919. 10s. 6d.)

VEDDER, G. C. *American methods in foreign trade. A guide to export selling policy.* (New York: McGraw-Hill. 1919. Pp. xii, 204.

American Methods in Foreign Trade with a subtitle "A Guide to Export Selling Policy" is rather a comprehensive title for a very slender piece of work. The chapter headings cover a very wide range of topics under the general title, not only discussing the foreign trade methods and policies of individual exporters but dealing

as well with such subjects as Fundamental Weaknesses of German Trade Policy, The Webb-Pomerene Act, International Crooks, Reciprocity Treaties and Preferential Tariffs.

The material is presented in good fashion and is, on the whole, interesting. To those who are approaching the subject for the first time it will probably be stimulating and possibly helpful. A large portion of the text, however, is argumentative, and the author is quite evidently writing pet hobbies to the exclusion of some of the facts and many possible points of view. His treatment of the subject-matter is, therefore, in many cases biased and one-sided and, on the whole, does not usually rise above newspaper copy.

The inadequacy of the author's treatment of certain subjects is illustrated in his chapter on the Webb-Pomerene Law and Combinations in Foreign Trade. The entire discussion covers four pages, or a little over 1200 words. Restricted as this is for the discussion of a legal measure that was agitated throughout the entire country for two years and recommended by the President of the United States, the discussion is practically a denunciation, largely unsupported by argument. The author's conclusion is that "The Webb-Pomerene Act was, at the worst estimate, a deliberate departure from principle with ulterior motives" (p. 19). There is no statement as to what the law actually is, or how it is proposed to work; there is no discussion of the possible forms of organization under it nor any account of what has been done so far.

Again, the author treats the subject of Reciprocity Treaties and Preferential Tariffs, in less than four pages. The definitions are very inaccurate and only a part of the subject indicated is really considered. Portions of the subject, as, for example, the purpose of a bargaining tariff, the most favored national arrangement, a maximum and minimum tariff, are entirely omitted. The author quite loses sight of the problem of international commercial policy and concludes that "A fair field and no favor is all that American goods ask or need in world trade."

There is much that is suggestive in the chapters on Exclusive Agents, Export Prices, Circularizing, Export Publications, Coöperating with Agents; but even here the treatment is too cursory, and too large a portion of the text consists of platitudes to be worthy of a serious work.

E. E. Pratt.

After-war trade plans of five nations. Great Britain, France, Italy, Japan, Germany. A series of five articles setting forth the preparations which these countries are making to expand their foreign trade when the world conflict ends. (New York: N. Y. Evening Post. 1918. Pp. 22. 25c.)

Annual report of the chief of the Bureau of Foreign and Domestic Commerce to the Secretary of Commerce for the fiscal year ended June 30, 1918. (Washington: Supt. Docs. 1918. Pp. 93.)

Boston Chamber of Commerce annual report, 1917-1918, containing

directors' reports, committees, by-laws, list of members, trade rules and trade statistics, etc. (Boston: Chamber of Commerce. 1918. Pp. 291.)

Essentials in exporting. (New York: Austin Baldwin & Co. 1918. Pp. 24.)

Export trade combinations under the Webb law, approved April 10, 1918. (New York: Guaranty Trust Co. 1918. Pp. 46.)

International trade in concentrated cattle foods. (Rome: Intern. Inst. Agriculture. 1918. Pp. 73. 1.50 fr.)

Official report of the fifth national foreign trade convention. (New York: Nat. Foreign Trade Convention, Hanover Sq. 1918. Pp. 581. $2.)

The world's trade in hides, skins and leather. (Washington: Tanners' Council of the U. S. A. 1919. Pp. 62.)

Accounting, Business Methods, Investments, and the Exchanges

Principles of Business. By CHARLES W. GERSTENBERG. (New York: Prentice-Hall. 1918. Pp. xiv, 821. $3.00.)

While the appearance of this work is not a new departure in business books, it approaches one because of the author's more than usual success in compressing into a single volume material that has usually defied presentation even in several volumes. It gives in brief yet surprisingly comprehensive form a statement of the best business practice, with the reasons therefor, in business organization, finance, management, purchasing, advertising, selling, and accounting. "This book I have written," says the author in his preface, "for the experienced business man and for the young man just stepping out into business life"; for the former because "he needs to have his vision broadened . . . and to be shown the business machine as a whole"; for the latter because, first, he needs to be shown before entering into business all the elements of business brought together into a whole in which the functioning of each element may be seen as a part of the whole, and because, second, "the young student should have his new studies connected with his studies in the sciences and arts that have been pursued in the preparatory school or in the university college of pure arts and sciences."

Considering business as an art in which successful practice must be based upon rules of technique, the "principles of business," the author proceeds to set down these rules and explain their significance. As here set forth they run nearly the whole gamut of busi-

ness activity from the more general questions involved in such matters as the form of organization and the method of financing a business unit down to such details as the use of the appeal to curiosity as a factor in advertising.

The author has accomplished his purpose so far as older business men are concerned with a considerable degree of success. The book will give the business man in any one of the major functional branches of business an insight into the significance of other branches and their relation to his own activities. For the young man about to enter into the beginner's narrow niche in the business world it may well perform a similar service.

The author is not so successful in relating either the study or the practice of business to "studies in the sciences and arts that have been pursued in the preparatory school or in the university college of pure arts and sciences." The connection between these studies he attempts to establish by means of five introductory chapters on The Science of Business, The Environment of Business, The Social Sciences (two chapters), and The Scientific Method.

The reviewer is uncertain just what the business man or the business student will get from these chapters. He is sure that the economist will be disappointed in them. The failure of the business world as a whole to link up business principles and business practice with sound social science, particularly sound economics, has been a source of uneasiness to economists for a long time. If the art of business is built upon the science of economics, or at any rate upon principles which are economic, as some of us have been telling our university classes for years, it ought to be easy to show how the "principles of business" are related to the principles of value and distribution which constitute so large a part of the economist's stock in trade. But the author has not done this. His account of the social sciences consists largely of a series of long and undigested quotations; one from Hobson on the service of science to the industrial arts and the limitations of economics in this connection, one from Giddings (inserted as a long footnote) on Spencer's sociological system, two expressing the views of Giddings and Hobson respectively on the possibility of useful statistical formulation in dealing with social problems, and a quotation from J. F. Johnson on business ethics. In addition to the quotations, economics receives about six pages, mainly devoted to the historical development of the science. Political science and law

receive seven pages between them, history comes in for about three pages, and sociology teaches in two sections (one quoted from the National Civic Federation) the scope and value of welfare work. It is, of course, not the amount of space that is significant, but the material that occupies it. This is the disappointing aspect of these chapters. The most careful study of these pages will fail to show even the most astute student of the social sciences, if he does not know already, how the "principles of business" as Gerstenberg conceives them are related in any important connection to the principles of any of the social sciences. They show only that the formulated principles of the social sciences are inexact and difficult of application in practical, everyday affairs.

More than that, the economist is bound to be disappointed in another direction. He is interested in the "social point of view," in the relation between business and the public welfare, while the business man is interested, from the nature of things, mainly in private profits, and has to give his attention chiefly to creating or appropriating them for himself if he is to remain a business man. Because of this difference in point of view, some of us have tried in our classes in economics to inject into the embryo business men who fill the benches in our class rooms something of the social viewpoint and the notion of a service ethics in business as a matter of living together in a society. It is nothing if not discouraging therefore to find this book beginning and ending with a notion of business that is summed up by its author in his preface as "profits brought home with all the resources of the living man" (paraphrasing Henry Ward Beecher). The only clear presentation of the obligations of the business man as a servant of society is found in the quotation from J. F. Johnson referred to above.

It is perhaps unfair to criticize the author for not doing that which he did not attempt to do. He does not pretend to have written a book in economics. In fact he distinguishes sharply between economics as the "social science of business" and a science of business which is not concerned with social questions, which, he says, is the field he cultivates in this book. If there is a place for a science of business efficiency, divorced alike from the social aspects of business, from questions of social ethics, and from adequate consideration of the dominance of the rights of the public to "interfere" for its own protection and to demand a business spirit more nearly that of the professions, then this book should fill admirably the need for a presentation of the principles of

such a science. The hard-pressed teacher in our growing university schools of commerce and finance may well find use for this book if he is willing to give up the effort to inflict the social point of view upon budding business men, is ready to cease the attempt to relate the study of business to the social science of economics, and is prepared to settle down to the teaching of business as a mere matter of profit making, with the public's part set forth merely as that of one "minority stockholder" in business (to use Gerstenberg's figure as given on pages 242-243), in which the capitalist is the majority stockholder and labor is on a par with the public as the other of two minority interests.

The book is not wholly devoid of effort to present the question of service as a dominating element in business. The trouble is that the occasional preachments on this subject appear as excrescences upon a work whose underlying assumption is that the modern, up-to-date business man always serves society because he makes more profits that way—the greater the service the bigger the profit. It is at any rate quite probable that the business man or student reader will leave the perusal of this book congratulating himself that he lives in an age when "in the long run the business man who makes his business conform to current social ideas on what is good and what is bad for society will make the most profits" (p. 11) without troubling himself to question the source of these ideas or worrying over the truth of the author's further assumption that "whatever injures society injures him" (the business man)—so long as the injury brings him a profit!

Harvey A. Wooster.

University of Missouri.

NEW BOOKS

Alcorn, E. G. *The Alcorn system of modern bank bookkeeping and accounting.* (Columbus, O.: American Text Book Co. 1919. $3.)

Cody, S. *Commercial tests and how to use them.* (Yonkers, N. Y.: World Book Co. 1919. Pp. 216.)

The author of this volume is secretary and managing director of the National Associated Schools of Scientific Business. He describes the tests that are applied to high school graduates who are employed in the United States employment service in New York City. Particular employments concerned are office boys, general clerks and sales people, stenographers, and bookkeepers. Nineteen tests are presented.

Coss, J. J. and Outhwaite, L. *Personnel management. Topical outline and bibliography.* (Washington: Classification Division, Adjutant General's Office. Jan., 1919. Pp. 58.)

Topics are grouped under: general list of reference works; periodical and serial publications carrying items of interest to personnel managers; industrial background of today; the personnel manager; labor turnover; labor supply; trade, technical and business schools; women in industry; immigration; the analysis of the worker; job analysis; industrial training and education; following up employees after assignment; promotion and transfer; wages; conditions of labor; accidents and their prevention; fatigue and production; hours; recreation; unemployment; industrial relations; protection of labor.

EATON, W. D., editor. *Library of law, banking and business.* (Chicago: John A. H. Hertel Co. 1919. Vols. 1-6.)

EGGLESTON, D. C. *Problems in cost accounting.* (New York: Appleton. 1918. Pp. xiv, 349. $2.50.)

This volume is one of a series of texts in commerce and related subjects under the editorship of the director of the Division of Vocational Subjects and Civic Administration in the College of the City of New York. It was developed, the author states, from a course of lectures at the College of the City of New York, and is intended to illustrate the typical problems of cost accounting by examples based on the author's experience in teaching and practicing cost accounting. After the principles are explained, with these examples, problems similar in general character are set for the reader or student to work out. The examples and problems published are a selection from those used in the class-room, arranged under fifteen general heads, six dealing with material, two with labor, two with overhead, and the remainder with a variety of general matters, including some applications of the principles of cost accounting in various industries.

This book is the first of its kind to be offered to the general public, similar compilations heretofore having been available for class-room use only. And probably the present work is of greatest value in the hands of an experienced instructor. It is doubtful, in fact, whether the book is likely to appeal to readers outside the class-room, although an earnest student of cost accounting will get some real help from a study of the examples and problems. An objection, which it would be extremely difficult to overcome in a work of this kind, is that the problems are individual and detached, without any such setting as they would have in actual practice. In this way and some others the book has the air of the class-room rather than the shop or factory, although the material could never have been produced except by reference to practical experience of the author. Taken individually the problems are generally sound and helpful. In many of the illustrative forms the ruling is far too heavy and the type too large for forms of the given size and shape.

It is a serious criticism of the author's command of accounting theory that he mentions interest on a mortgage debt as part of the cost of production (p. 248). There has been, unfortunately, prolonged debate regarding interest on investment as a manufacturing cost (the reviewer's opinion being unqualifiedly in favor of its in-

clusion) but the best known exponents of the theory that interest on investment is *not* a charge to cost of manufacture agree with the reviewer that interest on borrowed money in any form has nothing to do with the matter, and is uniformly to be excluded.

All told, *Problems in Cost Accounting* is a praiseworthy effort on a new and important kind of accounting literature, but likely to be superseded in time by books which more completely reflect actual factory conditions. C. H. Scovell.

Galloway, L. *Office management: its principles and practice.* (New York: Ronald. 1918. Pp. 701. $6.)

Lewis, E. St. E. *Getting the most out of business; observation of the application of the scientific method to business practice.* Sixth edition. (New York: Ronald. 1919. Pp. 515. $2.50.)

Manchez, G. *La Bourse de Paris après la guerre.* (Paris: Delagrave. 1919.)

Meron, F. *Manufacturer's instructor and adviser.* (New York: T. Audel & Co. 1918. Vols. 1-3.)

Nicholson, J. L. and Rohrbach, J. F. D. *Cost accounting.* (New York: Ronald. 1919. Pp. xxi, 576. $6.)

Racine, S. F. *Syllabus of bookkeeping.* (Seattle: Western Institution of Accountancy, Commerce, and Finance. 1918.)

Shelp, B. B. *Office methods. A practical bibliography.* (New York: Wilson. 1919. Pp. 27. 35c.)

Simmons, W. D. *The importance of the cash discount in the American credit system. An address before the convention of the New York Wholesale Grocers' Association, January 15, 1919.* (Philadelphia: G. H. Paine. Pp. 14.)

Stiles, C. R. and Powell, E. T. *The alphabet of investment.* (London: Financial Review of Reviews. 1918. Pp. viii, 54. 3s.)

Tinkham, J. R. *Advertising is non-essential—tax it!* (Upper Montclair, N. J.: The author. 1918. Pp. 61.)

Tobin, J. J. and others. *Highway cost keeping.* U.S. Department of Agriculture bulletin. (Washington: Supt. Docs. 1918. Pp. 52.)

White, J. S. *Central station heating. Its economic features with reference to community service.* Technical paper 171. (Washington: Bureau of Mines. 1918. Pp. 23.)

Bank and public holidays throughout the world. (New York: Guaranty Trust Co. 1919. Pp. 176.)

Course in modern production methods. (New York: Business Training Corporation. 1918-1919. Vols. 1-6.)

Maximum prices on iron and steel products. (New York: American Iron and Steel Institute, 61 Broadway. 1918. Pp. 176. 50c.)

A report on the profitable management of a retail lumber business. (New York: A. W. Shaw Co. 1918. Vols. 1-5. $12.40.)

Thirteenth annual convention of the National Association of Comptrollers and Accounting Officers, June, 1918. (Detroit, Mich.: J. W. Eisman, City Hall. 1918.)

Capital and Capitalistic Organization

NEW BOOKS

HAUSER, H. *La syndicalisation obligatoire en Allemagne.* (Paris: Tenin. 1919. 3.50 fr.)

JUNG, A. *Die staatliche Elektrizitäts-Grossversorgung Deutschlands.* (Jena: The author. 1918. Pp. vi, 121.)

TWYEFFORT, F. H. *Business corporations in New York.* (Rochester, N. Y.: Lawyers' Coöperative Pub. Co. 1918. Pp. cxliv, 1521. $10.)

A proposed solution of the gas problem. (Kansas City: Chamber of Commerce. 1918. Pp. 31.)

Report of special committee on government ownership and operation of public utilities. (New York: Merchants' Association of New York. Jan., 1919. Pp. 86.)

In this report the Merchants' Association "reaffirms its resolutions of November, 1916, opposing government ownership and operation of public utilities," on the ground that "governmental methods in the conduct of business affairs are inherently defective by reason of the fundamental restrictions imposed by our form of government, and that such methods are often inefficient and wasteful and therefore unsuited to the conduct of business undertakings."

No attempt is made to prove the case against public ownership by means of an array of statistics; on the contrary, questions of quality of service and of administration are stressed. Throughout, it is premised that "the fields of politics and economics are dissimilar and separate." Political rather than economic considerations largely determine the methods of conducting public business, and the results are found to be unsatisfactory for the following among other reasons:

1. "Political selection produces a personnel poorly qualified for economic service."
2. Executive officials under public control are hampered by rigid legal restrictions.
3. "The financial needs of a public business undertaking are usually not promptly or sufficiently met."
4. There is frequently "wasteful distribution of capital outlays."

After commenting briefly upon some examples of unsuccessful government ownership, the committee concludes that the changed conditions resulting from the war do not alter the basic argument that "political control, operating through political methods, is destructive of economic efficiency, and therefore such control should not be applied to undertakings of an essentially business nature."

It would be difficult to find a better summing up of the arguments

against public ownership as a general proposition. Those who disagree with the conclusions reached will probably be disposed to take a different point of view as to what undertakings are of an "essentially business nature." EDMOND E. LINCOLN.
Harvard University.

Labor and Labor Organizations

History of Labor in the United States. By JOHN R. COMMONS, DAVID J. SAPOSS, HELEN L. SUMNER, E. B. MITTELMAN, H. E. HOAGLAND, JOHN B. ANDREWS, and SELIG PERLMAN, with an introductory note by HENRY W. FARNAM. (New York: Macmillan Company. 1918. Pp. xxv, 823; xx, 620. $6.50.)

The publication of these two volumes brings to fruition researches upon which Professor Commons and the members of his seminar at the University of Wisconsin have been engaged for the past twelve years. In 1909-1911, Professor Commons with the coöperation of a number of other scholars published the *Documentary History of American Industrial Society* in eleven volumes, a collection of the more important documents relating to the history of American labor, with accompanying explanatory introductions. The present work traverses much the same ground with the exception that the subjects of slavery and serfdom, to which the first two volumes of the *Documentary History* were largely devoted, are not covered in the *History of Labor.* Frequent references to the *Documentary History* connect the two publications in such a way as to make a single work, the earlier publication serving as a form of documentary appendix.

The treatment adopted is chronological or rather periodic. Each of the six parts thus deals with a single period and each is written by a member of Professor Commons' seminar. Part I, Colonial and Federal Beginnings (to 1827), is by David F. Saposs; part II, Citizenship (1827-1833), by Helen L. Sumner; part III, Trade Unionism (1833-1839), by Edward B. Mittelman; part IV, Humanitarianism (1840-1860), by Henry E. Hoagland; part V, Nationalisation (1860-1877), by John B. Andrews; part VI, Upheaval and Reorganization (since 1876), by Selig Perlman.

It may be said conservatively that each part presents the most complete and authoritative narrative account available of the period with which it deals. There is hardly an important episode in the history of the labor movement which is not set in a new light. Thus, Mr. Saposs' chapters on the events from colonial times to 1827 are distinguished by an illuminating account of the

Cordwainers' conspiracy cases. Miss Sumner's history of the period from 1827 to 1837 contains a definitive study of the rise and development of workingmen's parties in New York—a chapter in the history of American labor hitherto only half written. Mr. Mittelman has given us an apparently final account of the development of the City Trades Union in the period from 1833 to 1837. Mr. Hoagland's history of the period from 1840 to 1860 is valuable because of the new light thrown on the early coöperative movement and on the "industrial congresses" of 1845 to 1856. The National Labor Union of 1866-1872 has nowhere else been so capably described as by Mr. Andrews in the section devoted to the period from 1860 to 1877. Finally, Mr. Perlman has included in his history of events since 1876 an account of the Knights of Labor which is not merely the best, but may fairly be said to be the only good account of that highly interesting organization.

The work is more, however, than merely the best available account of the events in the history of the labor movement. Careful attention has been paid throughout to the general economic background and to the labor philosophy of each period. The reader will find admirable summaries of the doctrines of such indigenous labor philosophers as Skidmore and Evans. The sheer joy of discovery has probably led to the magnification of some of these hitherto almost unknown priests of the movement. Ira Steward, for example, bulks somewhat more largely in the *History* than he does in actual influence. Also the relations between the American labor movement and European labor philosophies are carefully worked out. The chapter on Revolutionary Beginnings, for instance, is a contribution not only to the history of American labor but also to the world history of socialism.

It will, perhaps, seem ungrateful when so much has been done to ask more. Professor Commons has a clear right to an honorable discharge from the task at which he has labored so long and so well, but full benefit will not accrue from his work until one more step has been taken. In a brief preface to the first volume, he has outlined what may be styled "the theory of the development of the American labor movement." Undoubtedly the authors of the separate parts have built upon that foundation. Mr. Saposs, for instance, has included in his history of the period to 1827, a detailed statement of Professor Commons' very interesting theory of the development of bargaining classes, copiously fortified by historical material. But in the work as a whole the amount of de-

tail is so great that the theory is not closely knit with the facts. On the other hand, the preface is too compact for the reader to grasp fully the relations of theory and event. A final single volume which would combine the developmental theory with enough of the concrete history to give actuality would fittingly crown the largest and most capably executed piece of investigation in economic history which has been undertaken in our generation.

GEORGE E. BARNETT.

The Johns Hopkins University.

Hours of Work as Related to Output and Health of Workers. Wool Manufacturing. Research Report Number 12. (Boston: National Industrial Conference Board. December, 1918. Pp. 78. $1.00.)

"The purpose of the investigation is to establish the facts of this controversial subject and to present such conclusions as are clearly warranted by a scientific analysis of these established facts . . . to assemble the available results of actual experience . . . to determine the effect of reductions in work-hours on output and on health of workers" (p. vii and p. 1).

In the light of their own statement of purpose the authors should be judged. The order of treatment is as follows: (1) The statistical basis of the report; (2) the description of the general features of wool manufacturing, the chief processes and the hours of work; (3) a discussion of the hours and output of different groups of mills, according to hours worked and amount of reduction in hours, the largest group being the 54-hour group, in which there were 68 establishments, of which 55 reported a decreased output under the reduced schedule of working hours; (4) factors bearing on efficiency, such as size of mill, proportion of male workers, character of product, amount of reduction in hours, piece-work and day-work efficiency, speed of machinery, and attitude of workers; (5) actual statistical data as to output, and the difficulty of securing comparable data; (6) conclusions as to output; (7) the factors which affect the health of wool mill workers and conclusions as to the effect of the reduction of hours.

The data upon which the report is based were gathered by schedules of inquiry sent to the members of the National Association of Wool Manufacturers and other manufacturers, and by field investigation. Employers and workers were consulted and working conditions were observed. The *statistical basis* [italics

are mine] of the conclusions, the report informs us, consisted of replies to the schedule of inquiry from 111 establishments, employing 71,595 workers, supplemented by reports of field agents "who visited many mills." Here it should be stated that some detailed report of what the visitors actually did in their field investigation and how much time was devoted to an individual mill is needed. Any superficial observation of complex conditions is inadequate. Altogether the report covers 126 establishments in 13 states, almost one half of all the wool mill workers in the United States. Hours had been reduced in 85 establishments, with over 65,000 workers, in recent years and upon the reported results from these mills the conclusions rest.

Nowhere in the report do we find the exact form of the schedule sent to these mills—the specific questions the management of the mill was expected to answer, which is a grave defect in a scientific report; but the reader is told on page 3 that "*the information was in the form of statements reflecting the judgment of the respective manufacturers as based upon experience, and was in substantial accord with the results indicated by analysis of statistical comparisons of output* which were supplied by 13 of these establishments"[1] [italics my own]. The fact then seems to be that in only 13 out of 85 establishments, about 15 per cent of the total, are the conclusions based on actual statistical evidence and in these cases the data were furnished by the management of the mill. The authors of this report are hardly justified in speaking of the judgments of the other 85 per cent of the mills as statistical evidence at all for purposes of conclusions—"clearly warranted by a scientific analysis of the established facts" (their own statement of purpose).

The report frankly states the great difficulties in the way of securing comparable statistical data on output. There is manufactured a variety of products in a single mill. The weave and weight of the same product vary. Cotton warp is not comparable with woolen warp and the finish and weight may not run uniform over any considerable period. The speed of the loom is a variable factor and the yarn differs in size and material, all of which affects output when measured in pounds of yarn or yards of cloth. Moreover, the reduction of hours in over half the mills was made several years ago, and conditions have changed in the meantime.

[1] This last statement is to be questioned in view of the facts presented later in this review.

Besides, some mills now keep careful output records but did not do so before hours were reduced. A superintendent describes the factors that influence output directly or indirectly as "almost infinite." The president of one mill declares that "at least 90 per cent of the difference between the output of two weavers is due to the individuals themselves." The difference between high and low individual efficiency was reported as much as 30 per cent in some cases. As a result, the piece-workers more often than time-workers maintained output under a reduced schedule of hours of work. War conditions affected seriously the labor situation in the mills and thus influenced output.

Yet, notwithstanding the above and other difficulties and the fact that only 15 per cent of the mills actually submitted statistical data in support of their statements, the report declares that the conclusion is valid that "the 54-hour week has unquestionably placed a burden on the industry from a production standpoint." Furthermore, "the problem is by its very nature distinct from a problem in the so-called exact sciences." But statistics is an exact science which deals with numerical statements. Such statements were submitted from 13 mills and the results do not appear to be consistent with those obtained from the mere statements by the management, as shown in the table below. The authors admit the value of control experiments in the factory but fear that the worker may influence the result by conscious effort and they believe that "such experiments can be considered only as supplemental to experience as recorded under conditions as they actually occur in the factory." But the report itself has described these actual conditions so varied in the mill that it would seem a hazardous scientific procedure to depend upon "statements reflecting the judgment of the respective manufacturers as based upon experience" in so large a proportion of the total establishments reporting. In fact some experimental control of variable factors would seem the only way really to understand "conditions as they actually occur in the factory." Is it not the purpose of research in business to find ways of making business facts more exact and has not increasing precision attended these efforts in many fields? These precise measurements have actually been made in the very field covered by this report. A monograph, entitled *Use of Factory Statistics for the Investigation of Industrial Fatigue: A Manual for Field Research*, by P. S. Florence (Columbia University, New York, 1918), discusses in detail the difficulties and the practical procedure.

Furthermore, the Ministry of Munitions in England and the Sub-Committee on Fatigue under the Advisory Commission of the Council of National Defense for the United States have made such investigations, and have published or are about to publish valuable results. Other studies of this character are outlined in the text and excellent bibliography of a recent book by Frederic S. Lee, *The Human Machine and Industrial Efficiency*, (Longmans, Green & Co., 1918). The reviewer offers in evidence these studies in order to show that the matter under discussion is capable of exact measurement and analysis. The report says that "precise data, however, are not necessary" (p. 45). Perhaps not, to indicate some change in output, but that is not an explanation of why this change took place.

In the 54-hour group of mills 11 of the 68 mills furnished statistical comparisons of output compiled from book records while the remainder of the mills merely sent statements. The following table compiled from the facts stated on page 44 will summarize the situation:

Number of Mills Reporting Situation as to Output under Modern Schedule of Hours Reduced to 54 per Week.[1]

Output increased, maintained, or decreased in varying degrees	Total establishments under 54-hr. schedule	Eleven mills which submitted statistics from book records	Fifty-seven mills reporting by mere statement of the management
I Output increased	6	5	1
II Output maintained	7	–	7
III Output decreased but not proportional to time reduction	17	3	14
IV Output decreased in proportion to time reduction	26	2	24
V Output decreased more than proportional to time reduction	5	1	4
VI Not reporting amount of decrease	7	–	7
Total	68	11	57

[1] A total of 68 establishments, 11 of which submitted statistics from book records.

The reviewer recalls the statement (page 3 of the report) previously quoted, that "the information was in the form of statements reflecting the judgment of the respective manufacturers as based upon experience, and was in substantial accord with the re-

sults indicated by analysis of statistical comparisons of output which were supplied by 13 of these establishments." Eleven of these 13 are tabulated above and a glance will show that they contradict the statements from the other 57 who answered, not by statistics, but by statement. Only 8 of the latter, out of the 57, reported increased or maintained output, whereas 5 out of 11 offered statistical evidence of increased output. But if the 11 submitting the statistical evidence are representative, then a like proportion of increased or maintained outputs might be expected to appear among the statements of the other 57. Instead of the ratio of 5 to 11, the facts show 8 out of 57. Likewise, whereas 24 out of 57, reporting by statement, showed a decrease of output in proportion to decreased hours, only 2 out of 11 showed this situation where the actual book records were submitted. Seven out of 68 were positive in statement as to decreased output but did not attempt to state the amount. Further, on the same page, it is asserted that the mills where output was increased or maintained were chiefly the older and smaller mills. [Note that these were the mills furnishing the statistical evidence from their books.] And elsewhere the report accounts for this fact by the opinion that the larger and more modern mills, supplying the bulk of the trade, were already better organized before the reduction of hours and therefore after the reduction in working time could not maintain output by improvement in organization. Does it seem reasonable that, if these older and smaller mills were really less well organized, they could furnish statistical comparisons of output records from their books before and after the reduction of hours more easily than the better organized? Is it not likely that the larger and more modern mills, which reported in the main by statements of the managements instead of actual statistical facts from the records, were affected by a greater variety of variable factors described in this report, and, therefore, did not attempt to furnish statistical records to show comparative actual conditions of output. Then, is not the evidence for decreased output, for the most part, *ex parte* statements of a non-statistical character? General judgments and opinion evidence are of less value the more complex the variable factors involved. A single research authority must be the judge of the value of the evidence and not many individual mill executives.

On the matter of wage adjustments to compensate reduced working time and the effect upon output, the report, in Appendix A,

gives the answers received from the individual establishments. There is a very uniform report of "proportional increase" in wages, whatever this very vague statement may mean. Over what time did this "proportional increase" take place? Was it made to compensate for reduced hours as a stimulus to production or was it in response to the higher cost of living from 1912 to 1917? The report records the conclusion that "no clear relationship between changes in wages and changes in output, when hours of work were reduced, was indicated."

Now as to the second purpose of the report, to record the effect of the reduction of hours on the health of the worker, the evidence "suggests on the whole only unimportant changes—improvement in only a small number of cases." These conclusions are again based on *ex parte* opinion evidence and not on statistical evidence, as shown in Appendix A. There are no adequate records of sickness and reasons for absence from work. The following samples of reports on health changes are cited as given in Appendix A: "no difference," "good effect," "about the same, possibly a trifle better," "very little sickness," "health is good as it has always been," "health just as good with longer hours as with shorter." This evidence obviously has no scientific value.

The report gives the reader many interesting facts about woolen manufacture and the variety of factors affecting output and health, but its conclusions are based upon statements of opinion which, in the reviewer's opinion, are not adequately supported by statistical data of an unquestionably representative character. (Statistical data from some half dozen mills are published in some detail in the report.) The purpose stated in the beginning by the authors has not been attained. "The facts of this controversial subject" have not been established. The subject is left no less controversial. It follows that complete "scientific analysis" is impossible without the facts. Records of experience have been assembled to a very limited extent and nothing positive has been established as to health.

The writer wishes to see research of this character perfected and useful but he doubts the value of the *questionnaire* method in securing the evidence. It does not inspire confidence in the accuracy of the results and the method is entirely inadequate to cope with a complex factory organization with a great number of varying factors entering into any given result. Besides, the employer and his agents are interested parties and on this account

the records and results must be guarded from possible bias. This cannot be done in complex factory statistics by means of the *questionnaire* method of inquiry, but it can be done and is being done by the much more difficult and more scientific procedure of analysis of factory records, which are either available now or could be made available for industrial experimentation.

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The Human Machine and Industrial Efficiency. By Frederic S. Lee. (New York: Longmans, Green and Company. 1918. Pp. 119. $1.10.)

The trade-union slogan of a fair day's pay for a fair day's work has always been difficult to apply both as to time and as to wages. The result has been guessing at half and multiplying by two. Often the waste of human material in putting a man at the wrong job has been great. Professor Lee in this volume proposes a science of industrial physiology based upon the facts of present-day industry. The experience of Great Britain in the war munitions factories has been largely drawn upon. The activity of the human body, which plays so large a part in industry, must be organized on a physiological basis before the highest degree of efficiency can be secured. In other words, a science of the human machine must be developed in industrial establishments through observation and experiment.

Most of the substance of the book was given in two lectures at the Harvard Medical School and is now presented in seventeen short chapters on what may be called the use of human machinery without which mechanical machinery is of little value. Certain fundamental conditions of coördination between the worker and his work must be observed. These include the following:

1. Workers should be qualified for the work that they are to do.

2. Workers should produce a daily output in accordance with their individual capacities for work.

3. Workers should maintain their working power from day to day and from week to week.

4. Workers, once they have proved competent, should be retained.

Most of these points are merely axiomatic; the difficulty has been to translate them into actual practice. Professor Lee brings out clearly the various tests for vocational fitness, although, as he says, these methods are not very exact as yet. Fatigue is per-

haps the greatest enemy to high production and therefore much attention must be given to this subject in any study of industrial efficiency. The length of the working day is thus important and the best number of hours in various industries should be determined by scientific investigation. The practice of what is called in this country "soldiering" and in Great Britain "ca'canny," or self-limitation of output, is condemned as one of the most potent and most universal foes to efficiency. The causes are various, but the cutting of piece rates is said to be the principal one. The keeping of a fair rate between the employer and employee should be observed.

The study is of considerable scientific merit and one of its most valuable features is its numerous suggestions for further study. A rather complete bibliography shows what has already been done in the field.

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NEW BOOKS

Angell, N. *The British revolution and the American democracy; an interpretation of British labor programmes.* (New York: Huebsch. 1919. Pp. 319. $1.50.)

Benn, E. F. P. *The trade of to-morrow.* (New York: Dutton. 1918. Pp. 232.)

In *The Trade of Tomorrow* the author brings together a number of his scattered ideas regarding solutions of present-day problems of labor and capital. In the introduction he gives us a criticism which is not ill-founded from a scientific point of view when he writes: "This book is not a treatise on economics. The only argument in it is an argument for the admission of industry to a place in the Constitution and its organization upon a representative basis. It comes into the class of propagandist literature and expresses somewhat incoherent views of that peculiar creature, commonly known as the business man." Although Mr. Benn urges the formation of a Ministry of Commerce and Industry for the purpose of encouraging and facilitating British trade, much more emphasis is laid upon the creation of a Trade Council in connection with each industry, to which questions might be referred. Two-thirds of the members of such councils would be drawn from trade associations and trade unions; the remaining third would consist of government officials and scientific experts. Considerable attention is given to trade organizations, including export associations. In dealing with foreign organizations, such as German cartels and American trusts, the author gives some evidence of proceeding upon an insufficient basis of fact. Nevertheless, some of the suggestions developed in

the work are stimulating and indicate a more than usually active imagination. HARRY R. TOSDAL.

CARLTON, F. T. *Organized labor in American history.* (New York: Appleton. $1.75.)

COGHLAN, T. A. *Labor and industry in Australia; from the first settlement in 1788 to the establishment of the commonwealth in 1901.* Four volumes. (New York: Oxford Univ. Press. 1918. Pp. 2450. $33.)

COMMONS, J. R. *Industrial goodwill.* (New York: McGraw-Hill. 1919.)

CONNOLLY, J. *Labor in Irish history.* American edition. (New York: Donnelly Press, 164 E. 37th St. 1919. Pp. 144. $1.)

DEELEY, W. J. *Labour difficulties and suggested solutions. A manual.* (Manchester, Eng.: Sherratt. 1918. Pp. 175.)

KATAYAMA, S. *The labor movement in Japan.* (Chicago: Kerr. 1918. Pp. 147. $1.)

LEVERHULME, LORD. *The six hour day.* (New York: Holt. 1918. $3.25.)

ODENGRANTZ, L. C. *Italian women in industry. A study of conditions in New York City.* (New York: Russell Sage Foundation. 1919. Pp. 345. $1.50.)

PERKINS, H. F. *The manufacturer's wage problem.* (Chicago: Union League Club. 1919. 5c.)

PHELPS, E. M., editor. *University debaters' annual, 1917-1918.* (New York: H. W. Wilson Co. 1918. Pp. 274. $1.80.)

Contains constructive and rebuttal speeches delivered in debates of American universities and colleges during the year 1917-1918. Chapters 1 and 4 deal with compulsory arbitration of industrial disputes; chapter 2, government price control; chapter 5, federal regulation of industry; and chapter 6, minimum wage.

RECKITT, M. B. and BECHHOFER, C. E. *The meaning of national guilds.* (New York: Macmillan. 1918. Pp. xvi, 452. $2.50.)

ROCKEFELLER, J. D., JR. *Representation in industry. Address before the war emergency and reconstruction conference of the Chamber of Commerce of the United States.* (New York: The author, 26 Broadway. 1919. Pp. 31.)

ROWNTREE, B. S. *The human needs of labour.* (London: Nelson. 1918. Pp. 166.)

SMELSER, D. P. *Unemployment and American trade unions.* (Baltimore: Johns Hopkins Press. 1919. Pp. vii, 154.)

STENDER, A. *Hotel employees and labor unions.* (New York: International Geneva Association, 143 W. 44th St. 1918. Pp. 7. 20c.)

WOEHLKE, W. V. *Union labor in peace and war.* (San Francisco: Sunset Pub. House. 1918. Pp. 141.)

This small paper-bound pamphlet contains the greater part of the data published previously in the *Sunset Magazine* under the title of "Bolshevism of the West." It is a vigorous condemnation of organized labor in California during the past decade, written in a most prejudiced vein and flippant style. The stories concerning the abuses of the trade unions are for the most part founded on fact, but only one side of the story is ever presented. It is regrettable that every reader cannot know the actual situation and all the facts surrounding it, how the articles upon which the pamphlet is based came to be written, who inspired and paid for them, etc. If every reader knew these things, the attitude of the writer and the contents of the pamphlet would be more satisfactorily evaluated. I. B. C.

Decisions of courts affecting labor: 1917. Bull. 246. (Washington: Bureau of U. S. Labor Statistics. 1918. 25c.)

Covers decisions affecting employers and employees, wages, Sunday labor, factory regulations, railroads, workmen's compensation, etc.

Handbook and report of the National Council and Union of Women Workers of Great Britain and Ireland. (London: Parliament Mansions, Victoria St. 1917-1918. Pp. 151. 1s.)

In re mediation proceedings between Division 268 of the Amalgamated Association of Street and Electric Railway Employes of America and the Cleveland Railway Company, before the National War Labor Board. Statement of the Cleveland Railway Company. (Cleveland: Squire, Sanders & Dempsey. 1918. Pp. 105.)

Juvenile employment during the war and after. (London: Ministry of Reconstruction. 1919. 6d.)

Living wage (adult males), 1918. Bulletin of the New South Wales Board of Trade. (Sydney: Gov. Printer. 1918. Pp. 121.)

The manufacture of army shirts under the home work system. Women in war industries series, no. 1. (Washington: Council of National Defense, Advisory Commission. 1918. Pp. 24.)

Proceedings of the twenty-first annual convention of the Texas State Federation of Labour, held at San Antonio, Texas, March, 1918; including the constitution and laws. (Austin: The Federation. 1918. Pp. 118.)

Report of the proceedings at the fiftieth annual trades union congress at Derby. (London: Trade Union Congress. 1918. 2s.)

Rest periods for industrial workers. Research report no. 13. (Boston: National Industrial Conference Board. 1919. Pp. iv, 55. $1.)

The study of accidents for the year 1917. Portland Cement Association, bureau of accident prevention and insurance. (Chicago: Portland Cement Assoc. 1918. Pp. 28.)

Sixty-seventh annual report of the Amalgamated Society of Engineers, 1917. (London: 110 Peckham Road. 1918. Pp. 510.)

Weekly earnings of women in five industries (paper boxes, shirts and collars, confectionery, cigars and tobacco, and mercantile establishments. (Albany: N. Y. Dept Labor. 1919. Pp. 21.)

Money, Prices, Credit, and Banking

NEW BOOKS

ANDERSON, B. M., JR. *Price readjustment.* (New York: Nat. City Bank. 1918. Pp. 10.)

BENSON, R. *State credit and banking during the war and after.* (London: Macmillan. 1918. 5s.)

BOYD. *Early currency and banking in North Carolina.* Papers of the Trinity College Historical Society, series X. (Durham, N. C.: Trinity College. 1919.)

DE CASTRO, P. P. *Sistema positivo centrico del credito agricola.* (Madrid: Edicion de la Revista de Educacion Familiar. 1918.)

GIRAUD, S. *Le role de la banque de France pendant la guerre.* (Montpellier: Impr. de l'Ecole Professionale de Typographie. 1918.)

HARRISON, M. W. *Bank law and taxation digest.* (New York: Bankers Pub. Co. 1918. Pp. 108. $2.50.)

LEVY, E. *Exchange tables; for converting dollars into francs and francs into dollars; at all rates from 5.00 to 5.79; thus covering both war and normal requirements.* (New York: Dutton. 1919. $2.)

MARTIN, G. *Les problèmes du crédit en France.* (Paris: Payot. 1919. 4.50 fr.)

MILLIÈS-LACROIX. *Renouvellement du privilège de la Banque de France. Rapport 355.* (Paris: Comm. Finan. du Senat. 1918. Pp. 192.)

ROBERTS, G. E. *A creditor country. An address before the Investment Bankers Association of America at Atlantic City, December, 1918.* (New York: Nat. City Bank. Pp. 18.)

DE TOCA, S. *La organizacion bancaria del credito industrial.* (Madrid: Impr. de Jaime Ratés. 1918.)

Acceptance primer. (New York: Foreign Trade Banking Corporation. 1918. Pp. 22.)

Annual report of the Director of the Mint for the fiscal year ended June 30, 1918, including report of the production of precious metals during the calendar year 1917. (Washington: Supt. Docs. 1918. Pp. 259.)

Credits and collections. Shaw banking series. (Chicago: A. W. Shaw Co. 1918. Pp. xviii, 267.)

Like its four predecessors in this series, *Credits and Collections* presents "tested plans, methods, organization and the like," gathered from the practice of a large number of American banks. Many of

the devices described for the efficient handling of the work of the credit and collection departments have considerable merit, and the average banker will therefore find the book worth while. The portion of the work which deals with the credit granting process, moreover, is in refreshing contrast with the almost unbroken recital of experiences which characterizes the other volumes of the series. Here considerable attention is given to broad underlying principles of credit granting. The part of the book dealing with collections is largely a succession of descriptions of approved devices for handling the various collection operations. G. W. Dowrie.

Eighth annual report on wholesale prices, Canada, 1917. (Ottawa: Dept. of Labour. 1919. Pp. viii, 156.)

First interim report of committee on currency and foreign exchanges after the war. (London: Wyman. 1918. 2d.)

Gold production of the British Empire. Report of the committee appointed by the Treasury. (London: Wyman. 1919. 2d.)

Loans and discounts. Shaw banking series. (Chicago: A. W. Shaw Co. 1918. Pp. 264.)

The first part of the book is devoted to suggestions looking toward the improvement of the work of the loan department, special emphasis being laid upon the efficient keeping of records, the active functioning of the discount committee and the proper handling of the routine of discounting. Part two deals with the technique of the various kinds of loans with the exception of agricultural and real estate loans. The former are dignified by treatment in a separate part which covers almost half of the book. In part four, under the caption Three Important Problems, chapters on real estate loans, home builders' loans, and the relation of the savings account to the loan department are treated, the connection of the last-named topic with the other two not being apparent.

The book is frankly a description of the "how" to the exclusion of the discussion of the "why." Undoubtedly practical bankers will find in this symposium of experiences many helpful suggestions, but the reader who has only an academic interest in banking is likely to be bored by the endless amount of detail. G. W. D.

Proceedings of conference of business men and bankers, January, 1919. (New York: Merchants' Assoc. of N. Y. 1919. Pp. 30.)

Contains addresses by W. P. G. Harding and Paul M. Warburg on acceptances.

Proceedings of the thirty-ninth annual meeting of the Building Association League of Illinois, October, 1918. (Chicago: Am. Bldg. Assoc. News Co. 1918. Pp. 176.)

Report of Committee on Financial Facilities, on financial needs of trade and industry after the war, the credit system before the war and now, new issues, and state aid. (London: Wyman. 1919. 2d.)

Text book for speakers on thrift stamps and war-savings stamps. (Washington. Supt. Docs. Pp. 56.)

Trade acceptances. (Philadelphia: Mascot Pub. Co. 1918. Pp. 24.)

Wartime changes in the cost of living, July, 1914-November, 1918. Research report no. 14. (Boston: Nat. Indus. Conference Board. 1919. Pp. 33. $1.)

Working classes cost of living committee, 1918, report. Cd. 8980. (London: Wyman. 1918. Pp. 28.)

Public Finance, Taxation, and Tariff

Income Tax Procedure, 1919. By Robert H. Montgomery. (New York: The Ronald Press Company. 1919. Pp. xxviii, 979. $6.00.)

The writers of textbooks on the income tax have had an exceedingly hard row to hoe this year. To sell their books rapidly they had to get them on the market before March 15 when the individual returns were due. But the new law was not signed by the President until the end of February, and the report of the conference committees did not go before the House and the Senate until February 8 and 10 respectively, so that the time was exceedingly short. Although the Internal Revenue officers proceeded with phenomenal expedition and published a preliminary edition of the regulations under the new law almost simultaneously with the enactment of the law itself, yet these regulations had not been fully distributed before the first "returns" were due and delinquent. In face of all these difficulties Mr. Montgomery sent his book to press under date of February 25, 1919. He promises, in a supplement "which will be forthcoming during March," but which has not been received in time for this review, to add a study of the new regulations.

The American Economic Review said of the 1918 edition of this book (see vol. VIII, no. 2, p. 380) that it was "among the best of the handbooks" on the income tax. The 1919 edition is better than that of 1918. The improvements are well worth noting in detail.

Radical changes from the former editions are found in the arrangement of this edition. One of them is the segregation, under the caption "former procedure," of decisions and rulings under the 1913, 1916, and 1917 laws, which are important because still in force as to incomes attributable to those years, but which do not apply generally to income of 1918. The introductory chapter on the history and origin of the income tax has been rewritten for this edition by Professor Robert Murray Haig. A very useful section dealing with the administration of the tax law has

been added to the introduction. There is a marked improvement throughout the book in the general arrangement and presentation, which now show the hand of a skilled editor. It is particularly helpful to have the book logically divided into: part I, Application and Administration, which covers exemptions, returns, rates and computations, protests, appeals, refunds, information and stoppage at source; part II, Income; part III, Deductions; part IV, Special Classes of Taxpayers; part V, Excess and War Profits Taxes; and part VI, Miscellaneous, including, however, only the capital stock tax and the munitions manufacturers' tax.

An examination of the book shows that no pains has been spared to include all the new rulings since the last edition down to February 25, 1919, and all the new points of the "revenue law of 1918" so far as they could be drawn from the text itself.

The clarification of the distinction between capital and income which came with the rulings under the 1917 law and which has been embodied in the new law is well brought forth in the new edition (see p. 27, chs. XI and XXVI on depletion, and elsewhere). It is not surprising that the author failed to catch on his "cursory examination" of Regulations 45 (which he could not have had in hand more than a few hours) the remarkable concession contained in Article 47, that where compensation for a loss of property, as by fire, exceeds the value of the property lost "the transaction is not regarded as completed at this stage, however, if the taxpayer proceeds immediately in good faith to replace the property." One might be excused for not believing his eyes the first time he read that concession which has the most far-reaching consequences. Yet the concession is the logical sequence of those provisions of the new law, notably the one relating to losses by decline of inventory values, which recognize that, owing to the fluctuations in the value of money, "net railroad *money* income" is not always what it seems.

In the historical survey there is a lack of clearness as to the rates of the Civil War income tax (p. 16). One is left to infer from the language used that the rates under the law of 1862 and those under the law of 1864 were changed only as to their size. As a matter of fact the form of progression was fundamentally changed as well. Under the law of 1862 the rate changed abruptly at $10,000 from 3 per cent in the excess over $600 to 5 per cent on the excess over $600. That is, an income of $9,999 paid a tax of $281.97 and an income of $10,001 paid a tax of $470.05.

In 1864 the present system of applying an increased rate only to the excess over the maximum subject to the preceding rate was introduced. So that the rate was not 10 per cent on the aggregate of an income above $10,000, as implied in the book, but 10 per cent on the excess over $10,000. That is, the tax under the 1864 rates is only 10 cents more for $10,001 than for $10,000. Since this is a feature which differentiates the American from any other important income tax it is worth while to note when it was invented. This lack of clearness, which arose apparently from failure to consult the original statutes, is not new; it is to be found also in most of the older textbooks and histories.

Last year the book was criticised for its hostile attitude toward the farmers. This year, perhaps because there is a special schedule for farmers' income, the book contains a separate chapter on farmers. But that chapter contains little more than copies of the regulations. The alleged advantage to the farmer arising from not including crops consumed as food in the taxable income, is again allowed to obscure the fact that making each year stand on its own bottom creates far greater inequalities against the farmer. It seems rather far fetched to reproach the farmer for buying "automobiles and farm equipment" from "taxable income rather than from borrowed money"; and the apparent assumption that "farm equipment," by which is probably meant plows and tractors, is a capital investment and not a current expense is very weak accounting logic.

Last year comment was made on the "impatient expression of criticism, both of the law and of the administration." This year some of those expressions are graciously and condescendingly modified. "The 1918 revenue bill is almost a good one" (p. iii). Still, Congress has not "kept faith with the taxpayers" (p. iii). The apology to the Bureau of Internal Revenue is in substance: You're not quite such a fool as I said you were since you have taken a "more reasonable attitude" (p. 5).

While the author claims that "no suggestions for evading the tax" will be found in the book, it is still true as was said last year, that there are many arguments which a lawyer would be glad to incorporate into his brief in some case involving tax dodging. Notable in this connection is the broad hint on page 499 that a man may sell, say, Liberty Bonds, in December, take the loss as on a "closed transaction," then buy them back in January. This is all right, we are told, if it is not a "wash sale." It may be

legal but it is "rough stuff" (p. iv) just the same. The same line of criticism is applicable to the discussion (p. 407) of the "cost of professional books." In last year's addition there was an outright error on this point when it was said that such purchases were "allowable deductions." This year the statement is wholly revised, but a new and equally erroneous argument is set up in order to arrive at the same conclusion, namely, that since "depreciation may be claimed in respect thereof—the entire cost of professional or business books is deductible." If professional men handle their books so roughly as this implies why not have them printed as are babies' picture-books on stout linen cloth and varnished over. Nor does obsolesence apply. Even Colonel Montgomery's 1918 edition is not 100 per cent obsolete because of the publication of his 1919 edition.

Lest anyone should be misled by the above criticisms, which, after all, are on relatively small points, into thinking that it is not worth while to purchase the 1919 volume because he has the 1918 edition, we shall close this review by a specific reference to the chapter on Depreciation. This chapter has been entirely rewritten, and that not merely to embody the new provisions of the law and the new regulations, but in a way to present the interesting principles of accounting involved. Possibly depreciation is the most troublesome entry the taxpayer has to make. It is certain that it will be difficult to find anywhere any clearer, more practically useful and easily applicable instructions than have been written by Colonel Montgomery in this admirable chapter.

Carl C. Plehn.

University of California.

NEW BOOKS

Adams, R. C. *Taxation in Nevada; a history.* (Reno: Nevada Hist. Soc. 1918. Pp. 195. $1.50.)

Black, H. C. *Income and other federal taxes 1919.* Fourth edition revised. (Rochester, N. Y.: Lawyers' Coop. Pub. Co. 1918. $6.)

Blondel, G. *Pour une paix durable.* (Paris: Bossard. 1919. 4.50 fr.)

Fitzpatrick, F. A. *Budget making in a democracy. A new view of the budget.* (New York: Macmillan. 1918. Pp. 317. $1.50.)

Discussion of budgetary practice in the United States has centered, during the past decade, on the problem of devising a means of escape from the planless, extravagant appropriations that accompany the fiscal legislation of the national and many of the state

governments. Both in Congress and in the state legislatures coördination of appropriations is defective and expenditures are authorized in many cases without sufficient inquiry to determine their desirability. It is a common opinion that departmental estimates would be better coördinated and that many unwise expenditures would be eliminated if the chief executives—the president and the governors—were given greater responsibility in budget making.

The author takes issue with those who propose an enhancement of executive authority at the expense of a corresponding decrease of legislative control. He points out that to a considerable degree power finally to determine appropriations involves power to control the structure and politics of the government. A president or governor whose budget estimates might not be increased, except by a vote of two thirds of the legislature, could in many instances as effectively destroy a department or prevent the enforcement of a law as though he were the sole source of legislative authority. Such an arrangement would be intolerable in any government pretending to democracy. Only if the executive is directly responsible to the legislature may he be entrusted with so much power.

Budget making is essentially a legislative function and the part of the executive is purely preparatory. The chief executive should make the budget report to the legislature and he should as a matter of practice hold himself responsible for the amounts recommended for the support of the various departments, except in the case of the courts, the legislature and the independent administrative commissions. Beyond this he should not go, except in the exercise of the veto power. Moreover, the device of continuing appropriations should be used to minimize log-rolling in the legislature and to prevent the governor and the minority of either branch of the legislature from crippling established departments by defeating appropriations for their support.

For the reform of legislative procedure the author makes the usual recommendations. Appropriation committees should be as few as possible; the various appropriations should be correlated according to governmental functions; committees should make their hearings and proceedings public; and final consideration of the budget should be in committee of the whole. Disagreements between the two houses might be minimized by the creation of joint committees on finance.

The book is apparently intended for readers who have neither the time nor the inclination to study more elaborate treatises on the subject. It presents in a clear, interesting way the case for the legislative as opposed to the executive budget. Bibliography and index are lacking and references to standard treatises are few. On the other hand, recent discussions of budget reform in Congress, in state legislatures, and in constitutional conventions are considered under appropriate topics. F. B. Garver.

Fitzpatrick, E. A. *Experts in city government.* (New York: Appleton. 1919. Pp. v, 363. $2.25.)

Contains a score of brief stimulating essays by different authors dealing with problems of city making and more particularly the aid which expert service and specialized training can render.

Gide, C. *Des projets d'entente financière après la guerre.* (Paris: Tenin. 1919. 3 fr.)

Glasson, W. H. *Federal military pensions in the United States.* Edited by D. Kinley. (New York: Oxford Univ. Press. 1918. Pp. xii, 305. $2.50.)

Haristoy, J. *L'indemnité de guerre et la conscription des richesses de L'Allemagne.* (Paris: Alcan. 1919.)

Hollander, J. H. *War borrowing. A study of treasury certificates of indebtedness of the United States.* (New York: Macmillan. 1919. Pp. 215. $1.50.)

To be reviewed.

Holmes. *Federal income and profit taxes.* Second edition. (Chicago: Callaghan. 1919. $6.)

Huang, H. L. *The land tax in China.* Columbia University studies in political science, vol. LXXX, no. 3. (New York: Longmans. 1918. Pp. 180. $1.50.)

Mr. Huang's monograph on the land tax owes much of its very considerable interest to the fact that nearly half of its pages are given up to a summary sketch of the history of landed property in China. That fundamental portion of the economic life of the Chinese people exhibits, in comparison with European history, certain material similarities in systems of ownership, but also a wide dissimilarity, which by a fair surmise may seem to have had a determining influence in making the national life of China unlike that of occidental countries.

In no other large country has the tendency toward an oppressive concentration of land ownership met with a resistance so vigorous, and on the whole, ultimately triumphant. It appears that there have been several periods of concentrated ownership, several attempts with varying success, by imperial legislation, at a division of the great estates. Finally, the earlier Manchurian rulers contributed mightily to the dispersion of landed wealth, by an extensive distribution of land among the landless. One immediate cause of this wide distribution of ownership has been, apparently, the despotic character of rulership in China. There have been no "peers of the King": the rulers have been able to conserve the vigor of the masses by securing their hold on the soil. In several instances the frightful slaughter of foreign invasion or civil war has contributed to the same result, in rendering extensive areas available for colonization. Thus, apparently, by despotism and massacre China has been preserved from the ruin of *latifundia.* The fertility of the soil has been preserved through the centuries by the labors of an industrious yeomanry. A wide dissemination of ownership has maintained a

spirit of democracy which renders less difficult the establishment of a republic.

Mr. Huang has given an exceptionally clear and useful account of the confusion in the land tax and of the measures suitable for giving it definiteness and order. His conclusion is unassailable that this and other sources of revenue in China may readily be increased to a great extent by a rational systematization. In at least one argument there appears a tendency to exaggerate this possibility. The salt revenue is said to have been increased fourfold by the reform between 1913 and 1916, the figures being borrowed from a foreign periodical in Shanghai. The reference to 1913, as though it were a normal year, is a rather surprising error, since in that year the whole financial system had almost broken down. The increase under the reformed system has doubtless been considerable but much less than the claims of the foreigner and the modesty of some Chinese (including Dr. Huang) would indicate.

A. P. Winston.

McVey, F. L. *The financial history of Great Britain, 1914-1918.* Preliminary economic studies of the war, no. 7. Carnegie Endowment for International Peace, Division of Economics and History. (New York: Oxford Univ. Press. 1918. Pp. iv, 101.)

The purpose of this study is to give a condensed account of the methods by which the British government has attempted to solve the financial problems thrust upon it by the great war. The period studied extends from August, 1914, to the end of March, 1918. The topics considered by the author fall into three groups: (1) emergency measures for the reëstablishment of financial and commercial relation disrupted by the declarations of war; (2) public finance problems; and (3) some financial effects of the war. In the first part are described without comment the moratorium, the Courts Emergency act, the use of legal tender currency notes, and the events necessitating the closing of the stock exchange.

The second part deals in some detail with the successive war budgets, the votes of credit and the cost of the war, the war loans, foreign exchange and dollar securities, and taxation. Of the four war budgets reviewed, that presented by Mr. McKenna for the year ending March 31, 1916, was probably the best from the viewpoint of good fiscal practice. It was the only one to exceed in its provisions the actual expenditures and it provided for more nearly adequate taxation than any preceding. The attitude of Bonar Law, who succeeded McKenna, was less favorable to taxation and until the presentation of the budget for 1918-19 the tendency was to leave taxes as they were and to rely upon borrowing to meet the growing expense of military operations. About one fourth of the total cost of the war to April, 1918, exclusive of loans to the allies and the dominions, was raised by taxation. This the author is inclined to regard as a creditable showing in spite of the severe criticism of the London *Economist* and of other financial authorities. On the whole the British have distributed the burden of taxation in an equitable man-

ner: the rich are hit by the excess profits and the super-taxes, while those of moderate means are required to contribute by lowering the exemption of the income tax and by duties on commodities, chiefly beer and tea.

On the question whether the short-term government notes and the legal tender currency notes have been chiefly to blame for the rise in prices the author supports the conclusion that the increase has been due primarily to scarcity of commodities and of labor and to the unusual demands of the war. On the other hand, the extensive employment of short-term notes necessitated constant resort to bank credit and thus contributed to currency inflation. Moreover, the short-time obligations falling due at brief intervals embarrassed the larger loan operations.

One of the most striking effects of the war upon the fiscal arrangements of the British government has been the decrease of power of the House of Commons. The exigencies of war finance seemed at the outset to demand greater liberty of the executive. Hence the House ceased to prescribe in detail the purposes for which the public funds might be expended. This plan has not been without its disadvantages and at the close of the period covered by this study an insistent demand for a partial reëstablishment of parliamentary control had made its appearance.

In a brief account of complex and technical matters, such as this study, excellence depends largely on the skill of the writer in selecting the most significant facts and in weaving them together into a related whole. The first requirement has been admirably met, but either because of lack of space or the desire to avoid technicalities, the second has been only partially fulfiled. Extensive verification by the reviewer has revealed only a small number of unimportant instances of inaccuracy among the many tables, statements, and quotations which have been brought together from official documents and other sources. F. B. Garver.

Pierson, A. N. *Analysis of the laws affecting municipal and county finances and taxation.* (Trenton: New Jersey Commission for the Survey of Municipal Financing. 1918. Pp. 124.)

Seligman, E. R. A. *Our fiscal difficulties and the way out.* (Albany: N. Y. State Tax Commission. 1919. Pp. 16.)

Willoughby, W. F. *The movement for budgetary reform in the states.* (New York: Appleton. 1918. Pp. xi, 254. $2.75.)

Annual report of the comptroller, state of New York. (Albany: Comptroller's Office. 1919. Pp. xxvii, 427, 95.)

Digest of decisions of the United States courts, Board of General Appraisers and the Treasury Department under the customs revenue laws, together with the tariff acts from 1883 to 1913 and certain other customs revenue statutes. (Washington, Supt. Docs. 1918.)

Eleventh annual report on the statistics of municipal finances for city and town fiscal years ending between November 30, 1916, and March

31, 1917. (Boston: Mass. Bureau of Statistics. 1918. Pp. xxix, 805.)

Les finances de guerre de la France. La politique financière du gouvernement pendant les années 1915 et 1916. (Paris: Brière. 1919.)

Present sources of internal revenue and rates of taxation under existing law. (Washington: U. S. Office of Internal Revenue. 1918. Pp. 12.)

Renseignements statistiques relatifs aux contributions directes et aux taxes assimilées. (Paris: Ministère des Finances. 1918. Pp. 232.)

Statistique générale de la France. Statistique annuelle du mouvement de la population de la France d'après les registres de l'état civil au cours des années 1915, 1916, 1917, dans 77 departements. (Paris: Ministère du Travail et de la Prévoyance Sociale. 1919. Pp. 20.)

Suggestions of state comptroller Eugene M. Travis in relation to taxation. (Albany: Joint Committee of the Senate and Assembly on Taxation. 1919. Pp. 21.)

War profits and excess profits tax regulations under the Revenue act of 1918. (New York: Guaranty Trust Co. 1919. Pp. 27.)

The world's war debt. (New York: Mechanics & Metals Nat. Bank. 1919. Pp. 58.)

Population and Migration

NEW BOOKS

Briand, C. *Le dépeuplement de la France, son état actuel, ses remèdes.* (Paris: Bossard. 1919. Pp. 93. 2.40 fr.)

Hunter, E. B. *Infant mortality. Results of a field study in Waterbury, Conn.* Infant mortality series, no. 7. (Washington: Children's Bureau. 1918. Pp. 157.)

This is the fourth study of infant mortality in American cities made by the Children's Bureau, studies having been made also in Johnstown, Pa., Montclair, N. J., and Manchester, N. H. Investigations in other cities, including Saganaw, Mich., New Bedford and Brockton, Mass., and Baltimore, Md., are in progress and will be published later.

The report considers practically the same factors of infant mortality dealt with in the other studies—the age of the mother at the birth of the child, the order of birth and the length of the interval between births, ignorance of the mother of child care, the nursing care received by the mother during confinement, the method of feeding, the employment of the mother during pregnancy, the father's earning and the income of the family, nationality, housing, and the work of the civic and health agencies.

The results of this investigation, like all the others which the Children's Bureau has made, show "the repeated coincidence of the marked and generally regular decline in the infant mortality rate

with the increase of the father's earning. . . . The infant mortality rate for Waterbury for babies whose fathers earned less than $450 during the year following the birth of the baby was 153; the rate very gradually decreased in the next two income groups, but it did not fall below 100 until the group $850 to $1,049 was reached." It was 117.9 for the $850 to $1,049 group, 85.8 for the $1,050 to $1,249 group, and 89.6 for the $1,250 and over group.

The infant mortality rate was considerably higher for children of foreign born mothers (134.8) than those whose mothers were native born (97.7). Of the three chief classes of foreign born mothers represented, the rate among the children of the Lithuanian mothers was highest (207.7), the Irish next (184.6) and the Italians next (109.9). The rate was also lower for the children of foreign born mothers able to speak English than for those unable to speak the language. The study concludes that "Waterbury's infant mortality rate of 122.7 is largely the result of deaths from preventable causes" and recommends "an immediate campaign to reduce the rate to a minimum."

It will be desirable if, after completion, all the studies of the investigation can be summarized in a single report.

H. H. Hibbs, Jr.

Machat, J. *La dépopulation de la France. Les faits. Leurs conséquences matérielles. Le grand devoir.* (Paris: Ligue pour la Vie. 1918. .60 fr.)

Maroi, S. *I fattori demografici del conflito Européo.* (Rome: Athenaeum. 1918.)

Mitchell, G. W. *The question before Congress, a consideration of the debates and final action by Congress upon various phases of the race question in the United States.* (Philadelphia: A. M. E. Book Concern. 1918. Pp. 247.)

Rageot, G. *La natalité, ses lois économiques et psychologiques.* (Paris: Flammarion. 1919. 4.75 fr.)

Fertility of marriage. England and Wales. Census, 1911, vol. XIII, pt. I. (London: Registrar-General. 1918.)

Population and its distribution, compiled from the United States Bureau of Census figures. (New York: J. W. Thompson Co. 1918. Pp. 218. $2.50.)

Seventy-fifth annual report on births, marriages and deaths for the year 1916. (Boston: Secretary of the Commonwealth of Massachusetts. 1918. Pp. 273.)

Social Problems and Reforms

NEW BOOKS

Allen, C. R. *The instructor, the man, and the job. A handbook for instructors of industrial and vocational subjects.* (Philadelphia: Lippincott. 1919. Pp. vii, 373.)

Contains chapters on training in the plant, analysis and classifica-

tion of trade knowledge, trade instruction and its methods. The author has been superintendent of instructor training in the United States Emergency Fleet Corporation.

BAILEY, W. B. *Children before the courts in Connecticut.* Dependent, defective, and delinquent classes series no. 6. (Washington: Children's Bureau. 1918. Pp. 98.)

BEATTY, A. J. *Corporation schools.* (Bloomington, Ill.: Public School Pub. Co. 1918. Pp. 152. $1.25.)

BOGARDUS, E. S. *A guide for writing social science "papers."* (Los Angeles: Univ. of Southern California. 1918. Pp. 20. 25c.)

BRADLEY, F. S., and WILLIAMSON, M. A. *Rural children in selected counties of North Carolina.* (Washington: Children's Bureau. 1918. Pp. 118.)

ELLIOTT, A. W. *The cause of the social evil.* Third edition, revised. (Macon, Ga.: The author. 1919. Pp. 122. $1.50.)

FINDLAY, J. J. *Young wage-earner and the problem of his education.* (London: Sidgwick. 1918. Pp. 211.)

GORDON, E. B. *The Maine law.* Studies and documents of the anti-alcohol movement, 3. (New York: Revell. 1919. Pp. 124. 75c.)

LEAKE, A. H. *Vocational education of girls and women.* (New York: Macmillan. 1918. Pp. 430.)

MOULTON, H. G. *Public works or public charity? How to meet the labor crisis arising from the demobilization of troops and war workers.* (Chicago: Union League Club. 1919. Pp. 19. 5c.)

ROAN, W. C. *Vocational guidance and the public schools.* (Washington: U. S. Bureau of Education. 1919. Pp. 151.)

SAWISTOWSKY, R. E. *City planning for Davenport, 1918.* (Davenport, Iowa: Board of Public Works. 1919. Pp. 81.)

SLINGERLAND, W. H. *Child welfare work in Oregon. A study of public and private agencies and institutions for the care of dependent, delinquent and defective children.* (Eugene: Univ. of Oregon Extension Division. 1918. Pp. vii, 131.)

SMITH, E. J. *Housing: the present opportunity.* (London: King. 1918. Pp. 98. 1s.)

SCROGGS, J. W. *Social problems.* (Norman: Univ. Oklahoma. 1919. Pp. 156.)

SWIFT, W. H., director. *Child welfare in North Carolina. An inquiry by the National Child Labor Committee for the North Carolina Conference for Social Service.* (New York: National Child Labor Committee. 1918. Pp. 314. $1.)

This report deals in a direct and emphatic way with the conditions existing in a state which has an almost overwhelming program to carry out. The survey is presented under the following subjects:

Dependency and Delinquency, Child Caring Institutions, Agriculture, Rural School Attendance, Child Labor, and Law and Administration.

The juvenile offender is still handled according to antiquated ways, nor is there adequate public provision for the dependent or feeble-minded child. There are, however, a considerable number of child-caring institutions, some of which are doing excellent work. All orphanages must be licensed by the state, but child placing is poorly organized and is hardly practiced at all by the institutions. The adverse agricultural situation also operates rather harshly against the children of the state, especially as it reflects itself in child labor, illiteracy, and bad housing conditions. In the rural districts the school attendance is poor and the school terms are short. The children of the land owners lose less time than the children of tenant farmers. Child labor takes many forms. The report mentions work in the cotton mills but gives practically no description of its character.

The laws relating to child welfare are analyzed and their administration is discussed. Many recommendations are made, but they are so scattered through the report that the casual reader will find it difficult to obtain a picture of the needs of the state. Although presenting much unfavorable information the report is not critical in tone; it represents an honest effort to arrive at the facts and to use them for instructive purposes. GEORGE B. MANGOLD.

TEAD, O. *The people's part in peace.* (New York: Holt. 1918. Pp. 156. $1.10.)

Written during the final phase of the world war this essay reflects the vision of so many idealists that in the peace settlement which was manifestly soon to come, the causes of war would be forever removed and the world left free from the incubus of militarism to develop its life in peace and prosperity. Its purpose was "to suggest how the people may play a real part in the rearing of a just, democratic and stable peace." This peace must include a true League of Nations democratically constituted, together with international agreements for the solution of the basic economic problems, which as long as they remain unsolved will constantly menace the peace of the world. These problems are grouped under six heads: (1) the purchase of raw materials; (2) the sale of goods into foreign markets; (3) the sale of credit in foreign lands; (4) the export of capital for developments in foreign lands; (5) access to adequate shipping facilities; (6) movements of population between countries caused by varying living and working conditions. These topics are all discussed from a temperate and scholarly viewpoint, and show the futility of any political settlement which leaves these economic questions untouched. G. L. ARNER.

VEBLEN, T. *The higher learning in America. A memorandum on the conduct of universities by business men.* (New York: Huebsch. 1918. Pp. viii.)

Advising children in their choice of occupation and supervising the working child. (Washington: U. S. Dept. Labor. 1919. Pp. 14.)

Annual report of the Jewish Agricultural and Industrial Aid Society for the year 1918. (New York: 174 Second Ave. 1918. Pp. 49.)

A case of federal propaganda in our public schools. (Boston: Nat. Indus. Conference Board. 1919. Pp. 13.)

The Catholic Social Guild and its work. Yearbook for 1919. (London: The Guild. 1919. 1s. 2d.)

Child welfare in Alabama. An inquiry by the National Child Labor Committee under the auspices and with the coöperation of the University of Alabama. (New York: Nat. Child Labor Committee. 1918. Pp. 249.)

The church and the home-coming man. Suggestions for coöperation. (New York: Joint Commission on Social Service of the Protestant Episcopal Church. 1919. Pp. 30.)

The fifth annual report of the Homestead Commission, Commonwealth of Massachusetts. Pub. Doc. 103. (Boston: The Commission. 1919. Pp. 34.)

Housing after the war. Reports of the Housing of the Working Classes Committee, being extracts from the minutes of proceedings of the council, July 23 and October 15, 1918. (London: London County Council. 1918. Pp. 474. 1s. 2d.)

The municipal index, 1917. (New York: Municipal Journal. 1918. Pp. 118.)

Contains references to articles in more than 60 periodicals, grouped under the following titles: roads and pavements; sewerage, drainage and sanitation; water supply; street lighting and power; fire and police; street cleaning and refuse disposal; motor vehicles; traffic and transportation; city planning; government and finance; bridges; structural materials; miscellaneous. These main titles are classified under such topics as accounting, convict labor, and valuations and rates.

Occupations; short lists of books in the library. (Boston: Public Library. 1919. Pp. 14.)

Official handbook of national kitchens and restaurants. (London: Ministry of Food, 4 St. Paul's Churchyard. 1918. Pp. 64.)

Prisoners and juvenile delinquents in the United States, 1910. (Washington: Bureau of the Census. 1918. Pp. 535.)

Problems of reconstruction. A symposium. (London: Unwin. 1918. Pp. 315.)

The relation of industry to employment provision for the war blind. (Gilford, Baltimore, Md.: Red Cross Institute for the Blind. 1918.)

Report of the United States Housing Corporation. (Washington: U. S. Dept. Labor, Bureau of Industrial Housing and Transportation. 1919. Pp. 126.)

Rural children in selected countries of North Carolina. Rural child welfare series 2. (Washington: Children's Bureau. 1919. 25c.)

A rural social survey of Orange Township, Blackhawk, County, Iowa. (Ames: Agricultural Experiment Station. 1918. Pp. 450.)

Second annual report of the Federal Board for Vocational Education, 1918. (Washington: Supt. Docs. 1918. Pp. 172.)

Sixth annual report of the Chief, Children's Bureau, to the Secretary of Labor, fiscal year ended June 30, 1918. (Washington: Children's Bureau. 1918. Pp. 27.)

Social reconstruction; a general review of the problems and survey of the remedies. Reconstruction pamphlets, no. 1. (Washington: National Catholic War Council, 930 14th St. 1919. Pp. 24. $1.)

State housing manual; containing state tenement house act, state hotel and lodging house act, state dwelling house act. (Sacramento, Calif.: Housing Commission. March, 1918. Pp. 119.)

Trade foundations based on producing industries; a prevocational textbook, by prevocational and vocational directors, instructors, and tradesmen. (Indianapolis: Guy M. Jones Co., Merchants Bank Bldg. 1919. Pp. 522. $125.)

Trades and occupations; a classified list of some of the most useful books in the library. (Brooklyn, N. Y.: Public Library. 1919. Pp. 30.)

Tuberculosis findings. No. III. Framingham monograph no. 5. (Framingham, Mass.: Community Health Station. March, 1919. Pp. 35.)

Insurance and Pensions

NEW BOOKS

Barbour, R. P. *The theory and mechanics of underwriting. A lecture to insurance women.* (New York: Insurance Society of N. Y. 1919. Pp. 12.)

Dominge, C. C. and Lincoln, W. O. *Fire insurance inspection and underwriting; an encyclopedic handbook defining insurance terms and describing processes and materials used in mercantile and manufacturing establishments, and their fire hazards.* (Chicago: Spectator Co. 1918. Pp. 511. $5.)

Gephart, W. F. *Effects of the war upon insurance, with special reference to the substitution of insurance for pensions.* Preliminary economic studies of the war, no. 6. Carnegie Endowment for International Peace, Division of Economics and History. (New York: Oxford Univ. Press. 1918. Pp. 302. $1.)

Glasson, W. H. *Federal military pensions in the United States.* Carnegie Endowment for International Peace, Division of Economics and History. (New York: Oxford Univ. Press. 1918. Pp. xii, 305. $2.50.)

HOFFMAN, F. L. *Facts and fallacies of compulsory health insurance.* (Newark, N. J.: Prudential Ins. Co. 1919.)

HOFFMAN, F. L. *Failure of German compulsory health insurance. A war revelation. An address delivered at the twelfth annual meeting of the Association of Life Insurance Presidents.* (Newark, N. J.: Prudential Ins. Co. 1918. Pp. 21.)

LINDSAY, S. McC. *Insurance in war time and after.* (New York: Appleton. 1919. $2.)

PERKINS, C. R. *The agent. A lecture to insurance women.* (New York: Insurance Society of N. Y. 1918.)

The cost of compensation insurance in Virginia, describing the Virginia workmen's compensation act and discussing methods which produce compensation insurance at cost. (Boston: Liberty Mutual Ins. Co. 1918. Pp. 32.)

Fire insurance laws, taxes and fees, containing a digest of the statutory requirements in the United States and Canada relating to fire insurance companies and agents. Eighteenth annual edition, revised to September 1, 1918. (Chicago: Spectator Co. 1918. Pp. 539.)

Gain and loss exhibit for 1917. (New York: Spectator Co. 1918. Pp. 24.)

Proceedings of the special committee of Parliament (Canada) to consider and report upon the Pension Board, the pension regulations, and the sufficiency or otherwise of the relief afforded thereunder, the pension lists in force in Canada for disabled and other soldiers and the dependents of those killed while on active service, and any other matters relating thereto. (Ottawa. 1918. Pp. 349.)

Reports of fire insurance companies for year ending December 31, 1917. Thirteenth annual edition. (New York: Spectator Co. 1918. Pp. 44.)

United States Steel and Carnegie pension fund. Treasurer's and manager's eighth annual report, for year ending December 31, 1918. (Pittsburgh: U. S. Steel & Carnegie Pension Fund. 1919. Pp. 8.)

Workmen's compensation legislation of the United States and foreign countries, 1917 and 1918. Bulletin 243. (Washington: UU. S. Bureau of Labor Statistics. 1919. 40c.)

Pauperism, Charities, and Relief Measures

NEW BOOKS

ENGELMAN, M. *Four years of relief and war work by the Jews of America, 1914-1918.* (New York: Schoen Prtg. Co. 1918. Pp. 66.)

McLEAN, F. H. *Abstract of a report on the Department of Charities of the City of Rochester, N. Y.* (Rochester: Bureau of Municipal Research. 1918. Pp. 37.)

SLINGERLAND, W. H. *Child-placing in families.* (New York: Russell Sage Foundation. 1919. Pp. 261. $2.)

This is one of a series of books on special aspects of child welfare contributed by the Russell Sage Foundation. It is intended as a manual for practical workers in the field of child placing and is certain to serve a very useful purpose. The quality of child placing is so poor that a book such as this has been badly needed to develop standards and better methods. In part I the author sketches the organization of child-placing agencies and classifies children according to various social types; but the most valuable subject-matter is concentrated in part II under the title, The Technique of Child-Placing. A study is made of the problem, beginning with the reception of the child by an agency and following with the different processes of treatment and care. Emphasis is placed on the need of careful case study and of adequate record forms; plans are given for the erection of typical receiving homes for the children; the selection of family homes is considered; principles of child saving are discussed, and the need of proper supervision is earnestly demanded. However, no attempt is made to standardize this phase of the work. The author pleads for the state supervision of all child-caring agencies, whether they receive public funds or not, and clearly summarizes the advantages of such supervision.

In the discussion of systematic revision of child welfare laws, the defects and conditions revealed by the Missouri Children's Code Commission of 1916 are briefly detailed. However, adoption by deed was abolished in 1917 and a state-wide juvenile court law has been enacted. A chapter is devoted to the illegitimate child, but the subject is treated rather cautiously. Although the radical Norwegian law is denominated "sensible," in the enumeration of its principal provisions no reference is made to the important stipulation requiring joint responsibility for a child in case several men are implicated and the identity of the father cannot be definitely proven. Nor is mention made of the most radical law in the United States, that of North Dakota.

The book is enriched with a number of excellent illustrations, and also includes a short but well-selected bibliography on child welfare.

GEORGE B. MANGOLD.

WARNER, A. G. *American charities.* Third edition, revised by MARY ROBERTS COOLIDGE. (New York: Crowell. 1919. Pp. xix, 490. $2.50.)

This admirable revision of *American Charities* enables the book to continue its reputation as the classic in this field of sociological literature and its service as a textbook. With but slight variation the order of the chapters is that of the previous edition. However, several chapters dealing with the problems of poverty and of heredity have been added. The most notable contributions are the keen analysis of the present-day thought regarding charitable work and the array of new and well selected illustrative material. In ten years many changes have occurred and therefore the urgent need

of acquaintanceship with the freshly accumulated wealth of pertinent facts and figures. Chief among the subjects that are introduced or given new vitality and discussed in their relation to current thought are the eugenic program, alcoholism, commercialized vice, the Mendelian laws, the Kallikak and other degenerate families, industrial accidents, child labor, pauperism, unemployment, care of dependent children and of the feeble-minded, social insurance, federated philanthropy, state supervision of private charities, boards of social welfare and supervision and control of state charities.

There is little deviation from the point of view originally expressed by Professor Warner. As a consequence the social aspects of intemperance and of immorality are not adequately treated. Classified in this revision as personal causes of degeneration these vices are nevertheless largely a result of controllable social conditions. In a similar way the attack on poverty, although much more vigorously expressed than in previous editions, is unusually conservative and does not definitely attempt to grapple with the problem in a concrete way. Public outdoor relief, which the previous edition says should "usually be discontinued," is now tolerated and emphasis laid on the need of correcting faulty methods of administration, but the recent experiences with public subsidies to private charities indicates no reason for changing the attitude of antagonism to the policy. The chapter on The Trend of Modern Charity, is largely rewritten and emphasizes the need of preventive work. An enlarged and well selected bibliography completes the book.

G. B. M.

First annual report of the Commissioner of Charities and Corrections of Westchester County, New York. (East View, Westchester County, N. Y. 1918. Pp. 187.)

The roots of poverty. Forty-first annual report of the Charity Organization Society of Buffalo. (Buffalo: The Society, Social Service Bldg. 1918. Pp. 59.)

Thirty-ninth annual report of the State Board of Charity of Massachusetts, for the year ending November 30, 1917. (Boston. 1918. Pp. vii, 119.)

Socialism and Co-operative Enterprises

The Results of Municipal Electric Lighting in Massachusetts. By Edmond Earle Lincoln. Hart Schaffner and Marx Prize Essays in Economics. (Boston: Houghton Mifflin Company. 1918. Pp. xx, 484. $3.00.)

This book is an attempt to state impartially the facts as to eighteen public and seventeen private electric generating plants, and twenty-one public and sixteen private distributing plants, which purchase their electricity. On the basis of the facts as developed the author attempts to draw "scientific" conclusions as to

the relative merits and shortcomings of public as compared with private ownership and operation. On the whole, he has done fairly well in the collection and presentation of the detailed facts. Public records are supplemented with information secured from local and corporate records and by personal visits. The plants in Massachusetts are chosen because the records for such plants have been kept for a longer period and more accurately and completely than in other states.

The method used by the author is to compare the publicly owned or operated plants with the privately owned and operated plants on points where information of record can be secured, such as: station equipment, fuel consumption, load factor, street lighting costs, rates and service, the connected load, financial results, free service, unit costs in operating expenses, the disposal of net income, labor and wages, and the selection of employees. Certain facts are given as to the local background for each plant, and an appraisement is made as to the operating and distributing conditions surrounding each plant. This is important, as this method requires that the plants be so nearly comparable that a change in form of management from public to private or vice versa would secure the results characteristic of public or of private management, as the case may be, just because of the difference in the type of management.

As a matter of fact the two classes of plants are not exactly comparable, neither as to the charter or legal rights or powers, nor as to operating or distributing facilities and opportunities. For instance, the private companies are "centrally controlled," and this fact, according to the author, gives to the private companies some advantages over the isolated public plants, the only element of "central control" with the public plants being the supervision common to the private plants of the State Board of Gas and Electric Light Commissioners. Again, "in most cases the municipalities acquired their plants because otherwise they would have had no electrical service." A comparison between such of those private plants as are well located commercially with such of those plants as are public in order to get a service private capital would not at that time offer to give, is of little value without proper appraisal.

The author in conclusions and in appraisals leans toward the private rather than the public plant. For instance, he makes such generalizations as:

> Under democratic institutions, the larger the governmental body, the less economic and more political it becomes, and the more energy is wasted in accomplishing little. To blaze the trail is the work of a select few, not of the people *en masse*. The electrical industry as *all* industries which reach their perfection will be developed by personal genius and individual effort, urged on by the desire to serve, no doubt, but more potently stimulated by the prospect of material rewards (p. 368).

This is rather a "large" conclusion for the concluding paragraph of a monograph based on the study of about six dozen electric plants in one state. The whole book bears out the inference that these sentences reflect the "point of view" from which the work was done rather than a scientific conclusion based solely on the facts developed. However, the author has done better work even as to his conclusions than most authors in this field have done, while but few equal him in the accuracy and completeness of details and of presentation.

CLYDE L. KING.

NEW BOOKS

BOUGLÉ, C. *Chez les prophètes socialistes.* (Paris: Alcan. 1919. 3.50 fr.)

DEBS, E. V. *Before the court Nearing.* (New York: People's Print. 1919. Pp. 19. 10c.)

HALSTEAD, W. R. *The tragedy of labor; a monograph in folk philosophy.* (New York: Abingdon Press. 1919. Pp. 107. 50c.)

HICKEY, M. J. *Bolshevism. Self-defined and self-convicted. A collection of official decrees.* (Washington: Nat. Assoc. Manufacturers. 1919. Pp. 28.)

LAIDLER, H. W. *Study courses in socialism.* (New York: Intercollegiate Socialist Society, 70 Fifth Ave. 1919. Pp. 32. 10c.)

LANZILLO, A. *La disfatta del socialismo: critica della guerra a del socialismo.* (Florence: La Libreria della Voce. 1918. Pp. v, 301.)

LENSCH, P. *Three years of world revolution.* (London: Constable. 1919. 5s.)

MYERS, W. S. *Socialism and American ideals.* (Princeton, N. J.: Princeton Univ. Press. 1919. Pp. 100. $1.)

RUSSELL, B. *Proposed roads to freedom; socialism, anarchism, and syndicalism.* (New York: Holt. 1919. Pp. iii, 218. $1.50.)

TEITSWORTH, G. W. *Democracy against autocracy and socialism.* (Minneapolis: Augsburg Pub. House. 1918. Pp. 122.)

TODD, A. M. *Municipal ownership, with a special survey of municipal gas plants in America and Europe.* (Chicago: Public Ownership League of America. 1918. Pp. 122.)

This is the second booklet published by the Public Ownership League of America in their efforts to carry on an organized propaganda, based on the "investigations" of "competent and reliable authorities," according to their own statement. The author, having stated in his preface that he has "for over thirty years made a special study of public utilities under both public and private ownership in our own and foreign countries," launches forth in the first chapter with the premise that "Public ownership is a natural government function and necessary to secure democracy." Three sketchy chapters follow on the development and scope of the gas industry in the United States. Other chapters deal in a most superficial fashion with the gas plants in Philadelphia (now privately owned), in Richmond and in Duluth (both municipally owned). One of the longest chapters is devoted to The Fight for Municipal Gas in Kalamazoo, which to date has been unsuccessful. In the space of 15 pages there is an attempt to prove that public ownership of gas plants in Great Britain, viewed from every angle, has been a pronounced success as compared with private industry in the same field. Marked emphasis is placed upon one or two apparently successful examples of municipal ownership, while failures are ignored and no mention is made of successful private plants.

The point of view throughout is wholly partisan, and no fundamental analyses of the questions involved are presented. Important physical features of the business, very significant in making comparisons, are utterly ignored. The author's few secondhand figures are backed up by frequent quotations from the antiquated studies of James, Bemis, and Parsons, the most recent of which is 20 years out of date, and none of which were made without personal bias. Investigations by those opposed to public ownership are ignored, and their statements are gratuitously assumed to be "misleading" or dishonest. The notion is constantly stressed that our officials and legislators are too weak and unprincipled to withstand bribery by public service corporations privately owned, but it is further inferred that if such enterprises were *entirely* in public hands the character of these same wrong doers would be so thoroughly changed as to debar political corruption!

As there is so little of scientific merit in the book, it scarcely calls for further discussion. It is unfortunate, however, that at a time when the question of public ownership is of such vital importance, those who take the trouble to write on the subject should not study their fields more carefully and give their readers something really worth while.

EDMOND E. LINCOLN.

VANDERVELDE, E. *Socialism versus the state.* (Chicago: C. H. Kerr Co. 1919. Pp. 229. $1.)

VERINDER, F. *Methods of land nationalisation: a brief, critical, examination of some proposals of the Land Nationalisation Society.* (London: League for the Taxation of Land Values. 1918. Pp. 16. 2d.)

WILLIAMS, A. R. *Russian soviets. Seventy-six questions and answers on the workingman's government of Russia.* (New York: People's Council. 1919. Pp. 29. 10s.)

WOOLF, L. S. *Coöperation and the future of industry.* (New York: Macmillan. 1919. Pp. 141. $2.)

This is a solid contribution to the study of consumers coöperation. From The Roots of the Movement it carries the analysis into those aspects of the question that have left such confusion in most American literature on this subject. If any intelligible meaning is ever to get into that phrase now upon every tongue—"democratizing industry"—very clear distinctions have to be made among a whole order of conflicting interests. The coöperators who have done more than any or all others to show the possibilities of democracy in business are those who approach it from the side of consumers. It required more than a generation of experiment and overheated discussion to clear up these understandings. Labor copartnership in all its forms; farmers, selling societies, citrus fruit associations, even bonus systems and profit sharing have been hopelessly jumbled with Rochdale coöperation. This book brings out these distinctions with admirable lucidity. What Beatrice Potter did nearly a quarter of a century ago in a study which Schmoller called "road-breaking in importance," this author carries out and brings up to date.

For the first time in the United States the tide of a working-class Rochdale coöperation is rising on a scale that has real promise. In the world turmoil, it is probably the most *conservative* movement now observable—conservative because it throws upon labor groups sharp and specific business responsibility. Except to take profits in the capitalistic sense, labor has to do about everything done in ordinary business. To succeed, it must outmatch capitalistic management in its own field. Much smug advice is being given to labor about its behavior. It will take very little of it. Labor is now to try its own hand in business and in politics. If it has more special need of "education" than any other class, this form of coöperation will furnish it more directly and more wholesomely than all other agencies combined.

The final chapter, on Coöperators and Political Action, carries the author into utopian expectations which will rouse criticism. He looks toward an industrial future directed almost absolutely by consumers. He does not flinch from the logic of this position. We must have "conscription of labor" (reminding us of William James's well known suggestion) in order to get the necessary amount of production, especially to get the harder and more distasteful labor performed. His harmonizing of interests between producer and consumer is too easily done. It not only runs counter to the whole mass of profit-making business, but quite as sharply against radical labor in the Syndical and New Guild movements. This flight toward things millennial should not, however, detract from the debt we owe to this study. JOHN GRAHAM BROOKS.

Les chefs socialistes pendant la guerre. (Paris: Nouvelle Librairie Nationale. 1919. 4.55 fr.)

The replies of the socialist parties of the Central Powers to the "memorandum on war aims." The preliminary draft of a peace programme by a committee of neutral socialists. An open letter on the "new socialist peace conference" from M. P. J. Troelstra to the Right Hon. Arthur Henderson. (London: Labour Party, 33 Eccleston Square. 1919. Pp. 71. 6d.)

Statistics and Its Methods

Disabling Sickness Among the Population of Seven Cotton Mill Villages of South Carolina in Relation to Family Income. By EDGAR SYDENSTRICKER, G. A. WHEELER, JOSEPH GOLDBERGER. Reprint 492 from the United States Public Health Reports, vol. XXXIII. (Washington: Superintendent of Documents. Nov. 22, 1918. Pp. iv, 2031-2091.)

When Thomas R. Malthus published his treatise on population, he gave scientific form to the general belief that poverty and disease are inseparable companions. Since that date, this fact has probably been tacitly accepted by most thinking people; nevertheless, statistical proofs and mathematical measurements of this relationship have been most scanty, and, strangely enough, while everyone has been perfectly ready to admit that the relationship exists, it has in practice been virtually overlooked by many able investigators. Insurance actuaries, for example, have worked out elaborate tables to show the relationship of sickness and mortality to age, sex, and occupation, while ignoring entirely the income status of the individuals studied. This tendency has doubtless been accentuated by the difficulties involved in obtaining reliable information concerning income.

The authors of the pamphlet here reviewed recognized these difficulties fully and made a systematic effort to overcome them which proved completely successful. Family income was estimated by first getting the wages of mill workers from the payrolls and then adding thereto income from other sources as calculated from detailed estimates furnished by each family. But, since families differ greatly in size, total family income was useless as a criterion of welfare. Before it could be utilized, it was essential that the size of the family should be determined and that the total income in each instance should be divided by the relative size of the family. Since persons of different ages and sexes have decidedly different needs for articles of consumption, the mere number of persons in

a family is far from being a satisfactory gauge of the size of the family. As a result, it was decided to rate the size of each family in proportion to the number of "adult male units" that it contained according to the Atwater scale. This scale, while originally computed upon the basis of *food requirements*, is, nevertheless, roughly proportional to the *general needs* of persons of different ages and sexes. The income for each family for a half-month period was divided by the number of adult male units in that family. The families were then classified according to income per adult male unit and the sickness rate calculated for each class. Sickness was defined, not in terms of pain, but as inability to perform one's usual duties. The study covered 4,161 persons in 747 households of cotton mill workers, a number large enough to constitute a reasonably fair sample. It must be kept in mind that none of the families are more than moderately well-to-do and the conclusions, therefore, probably characterize the poorer classes rather than the general population of the United States. The results of the inquiry are most striking, as the following table shows.

CASES OF DISABLING SICKNESS PER THOUSAND PERSONS OCCURRING AT A GIVEN CENSUS DATE IN THE LATE SPRING OF 1916 IN SEVEN COTTON MILL VILLAGES OF SOUTH CAROLINA.

Half-month family income per adult male unit	All persons	Wage-earning persons	Non-wage-earning persons
All incomes	45.2	40.2	49.1
Less than $6.00	70.1	80.0	65.0
$6.00 to $7.99	48.2	51.6	45.8
$8.00 to $9.99	34.4	18.8	53.1
$10.00 and over	18.5	14.9	22.5

It thus appears that the sickness rate of the poorest class was approximately four times as great as that of the most prosperous class and that the difference was maintained for both wage-earners and non-wage-earners, though it was somewhat more marked in the case of the former. Supplementary tables in the bulletin show that the same higher rate appears for nearly all of the various ages and sexes and for non-mill workers as well as for mill workers. This proves that the inverse relationship existing between income and sickness is real and not merely apparent.

In collecting the original data, when cases of sickness were found, an inquiry was made as to how long the sick person had

been incapacitated. These figures, when analyzed, show very distinctly that the illnesses among the well-to-do families were normally of much briefer duration than were the illnesses of the poverty stricken.

The authors very wisely caution the reader against assuming that the figures here given prove that poverty is the dominant cause of sickness. As a matter of fact, it is doubtless true that some of the poverty is caused by illness of those supporting the family, resulting in their inability to earn wages. To a larger extent, probably, poverty arises from low earning power, due to low efficiency, and this in turn is a product of a varying mixture of bad heredity, improper nourishment, and lack of education, the last two of which are caused largely by poverty. And so the endless chain moves on!

But this does not at all detract from the value of the facts presented. The investigation appears to demonstrate quite conclusively that, whatever the causal sequence, poverty and disability go hand in hand. It follows, then, if health conditions are so closely bound up with the economic circumstances of the persons under consideration, that conclusions derived from any study of sickness rates which fails to take account of family income must, necessarily, be subject to grave doubts as to their validity.

On the whole, the study furnishes a valuable contribution from the point of view of the economist as well as from that of the scientist interested primarily in questions pertaining to health.

WILLFORD I. KING.

Spartanburg, S. C.

Introduction to Mathematical Statistics. By CARL J. WEST. (Columbus: R. G. Adams and Company. 1918. Pp. 150.)

This attractive book should appeal to every worker who deals with any kind of statistical material. Among its noteworthy features are: a clear exposition of the best methods of plotting data, smoothing curves, and testing goodness of fit, with applications to fluctuations of prices, rainfall, yield of crops, etc.; a careful explanation of the significance of a frequency distribution, and of the various weighted averages, more especially the standard deviation from the mean, and the use of the normal frequency (or probability) curve in various statistical problems; an unusually complete and lucid treatment of the three chief indices for measuring the degree of relationship between two varying characteristics, namely, the correlation ratio, the coefficient of corre-

lation, and the coefficient of contingency, showing to what kinds of material the three methods are respectively appropriate, and giving their practical significance, with various useful cautions, and a section on spurious correlation; also a welcome chapter on the methods of moments, and its application to curve fitting, with simplified processes for computing the moments of different orders and checking results.

No knowledge of calculus is assumed except in appendix I, which gives an excellent summary of Karl Pearson's formulas for smoothing data by fitting the generalized frequency curves of appropriate type. It may be well to warn the reader that in some of the formulas the printer has confused the Greek letters γ and ν, and that in the enumeration on page 138, type II in the fourth line should be type VII with $\beta>3$, and type VII should be type VI. The classification adopted is that given by Pearson himself in *Tables for Statisticians and Biometricians* (1914), and differs somewhat from earlier classifications.

In the second edition it would, perhaps, be desirable to insert another appendix presuming an elementary knowledge of calculus, and giving a proof of the equation of the normal probability curve, and the resulting principle of least squares. It would then be possible to show that the method of moments used in determining the line of regression in the chapter on correlation, furnishes the most probable value of the slope of that line; also that in fitting parabolas of any order the method of moments gives the same result as the method of least squares, and hence gives the most probable fit, a fact which originally suggested to Professor Pearson the extension of the method of moments to cases where the method of least squares is not applicable.

A slight knowledge of calculus would also enable the student to understand the important "law of propagation of error" by which one can find the probable error of a function of several variables whose respective probable errors are given.

Another useful statistical formula which could be included is that of Bernoulli, which gives the frequency of a given random deviation from the normal (or expected) number of successes in repeated trials. This would furnish an approximate answer to such practical questions as the following: In a town of 15,000 inhabitants the normal annual death rate is 14 per thousand; but in a certain year it was 16 per thousand; what are the odds against a deviation as great as this being due to pure chance, without any significant change in sanitary conditions?

There is no dearth, however, of practical statistical examples and exercises in this interesting book. They are well graded to illustrate the various principles in the text, and should make the work very welcome to instructors of college classes as well as to statisticians in general.

JAMES MCMAHON.

The Mathematical Theory of Population, of its Character and Fluctuations, and of the Factors which Influence them. By G. H. KNIBBS. Appendix A, Volume 1, Census of the Commonwealth of Australia. (Melbourne: Commonwealth Statistician. 1917. Pp. xvi, 466.)

The author says in his foreward that this monograph "aims on the one hand at supplying the elements of a mathematical technique, such as are needed for the analysis of the various aspects of vital phenomena that come under statistical review, and, on the other, at interpreting material made available by the first Census of Australia which has been carried out upon uniform lines and by a central authority." The results of the study "have brought into clearer relief the necessity for recognizing that the variation of any one statistical element affects all other statistical elements, so that the satisfactory reduction of 'crude data' to a common system is by no means an easy undertaking, and the comparability of the statistic of two communities can never be rigorously exact in all particulars."

The scope of this highly technical mathematical analysis may be gleaned from a brief description of its contents. The first eight chapters are devoted mainly to method, such topics as the following being discussed: types of population fluctuations; curve constants and intermediate values; types of curves and their characteristics; group value and integration for statistical aggregates; the place of graphics and smoothing in the analysis of population statistics; conspectus of population characters.

In these chapters primary emphasis is given to the development of mathematical formulas to describe population distributions and the curves which represent them. Among other things discussed are types of population fluctuation, note being taken of the determining factors which secularly influence rate of population increase. A large amount of comparative data on population growths is given for the important countries of the world and the likelihood and consequence of such a rate continuing are pointed

out in detail. Especially worth noting in this part of the volume is the discussion of smoothing statistical data. The fact that general impressions that are often unwittingly or purposely conveyed by a free use of smoothed curves is sufficient justification for quoting briefly from the volume on this point.

There are four principal classes of data to which the process of curve-smoothing is applicable. These may be indicated as follows:

(i.) Frequencies of a phenomenon at successive epochs or during successive periods of time; as, for example, population estimates at given dates and numbers of deaths occurring during successive years.

(ii.) Rates of occurrence of a phenomenon per unit of reference during successive periods; as, for example, birth-rates per thousand of population per annum for successive years.

(iii.) Frequencies in respect of successive values of characters capable of continuous variation; as, for example, the number of persons at each age recorded at a given census.

(iv.) Rates of occurrence of a phenomenon per unit of reference in respect of successive values of characters susceptible of continuous variation; as, for example, rates of mortality per unit per annum during a given decennium in respect of each age.

In all these cases the characteristic of continuous variation is assumed to exist either actually or virtually. Where statistical results are *discontinuous* such a process is, strictly speaking, inapplicable; as, for example, in the tabulation of census population according to birthplace, occupation, or religion. In some cases, however, although the data are strictly speaking discontinuous, the principle may be applied partially; for example, in the case of a tabulation of dwellings according to number of rooms or according to number of inmates. In such cases the character possessed is *progressive without being continuous;* nevertheless, with proper qualifications, the smoothing principle may be applied even to these.

Object of smoothing.—From the foregoing it will be seen that the data to which the smoothing process is strictly applicable are those which may be regarded as functions of a continuous variable. . . . The essence of the matter is that in any instance the data are in the main such as admit of representation by means of a continuous line, or a continuous surface or solid in relation to continuous units of reference. When such representation has been made of the crude results of observation, it is ordinarily found that the line surface or solid exhibits evidence of marked irregularities as between adjacent points or series of points, their general trend, however, suggesting an underlying basis of orderly progression. This progression is, of course, affected by minor influences operating at individual points, and is more or less masked by the paucity of the data on which the representation has been based; thus, suggesting further that were it possible to obtain data of unlimited extent, these irregularities would become neg-

ligible. For this reason the object of the smoothing process may be said to be that of removing these apparently accidental irregularities, and of thus disclosing the basic or ideal uniformity which may be presumed to represent the facts in all their generality.

Justification for smoothing process.—The justifications for the smoothing process may thus be said to be:

(a) That the irregularity does not represent the phenomenon in its generality, since much of the observed irregularity is known *a priori* to be due only to paucity of data;

(b) or that it is known that the phenomenon subject to observation is really regular;

(c) or, again, that the observed data suggest that regularity of trend will not efficiently represent them.

It has been objected that any system of smoothing is, strictly speaking, unwarrantable, since such a process virtually attempts to make the facts accord with more or less questionable preconceptions regarding them. To this view it may be rejoined that if the process were such as to produce results which, though smooth, differed systematically and materially in their distribution from the original observations, the objection would be valid. Where, however, due consideration is given to the relative magnitudes of the original data, and the smoothed results accord therewith as closely as the data will allow when these exhibit a general trend, then the only preconception that can be regarded as operative is the justifiable one that ordinarily natural phenomena do not progress *per saltum*. In this connection it must be noted that where there is distinct evidence at any stage of a cataclysmic disturbance of results, the smoothing process for such points or periods will usually be invalid or not properly applicable. . . .

One of the most cogent justifications for the smoothing process has its warrant in the fact that the recorded results of any statistical observations are necessarily approximative, and hence that the value of the function *recorded* for any given value of the variable is probably not usually more accurate than an estimate based on the recorded values in respect of preceding and succeeding values of the variable. This consideration suggests the idea of weighting successive observations to obtain most probable values, which idea forms the basis of one of the leading methods of adjustment. Again, where the results of the observations are to be employed as guides to future action, it is clear that these results should, as far as practicable, be freed from all fluctuations which may be considered merely accidental, and thus unlikely to be reproduced in future experience. This is of considerable importance in connection with the construction of mortality and sickness, superannuation, and similar tables to be used in the computation of rates of premium, and for the conduct of valuations.

Later chapters are given over to description of the Australian population according to sex and age; masculinity; natality; nuptiality; fertility and fecundity and reproductive efficiency; mortality; migration, etc. This part of the discussion is likewise mathe-

matical and unique in studies of population. Nowhere else, so far as the writer's knowledge goes, can there be found, for instance, such a fundamental and critical analysis of error, as is encountered in statistics of birth, marriage, and divorce, given in this monograph. A unique feature of the discussion is the treatment of migration. Under this head are discussed such topics as correlation, owing to migration, between age and length of residence, periodic fluctuations in migration, migration and age, etc.

It is impossible within the short compass of a review adequately to deal with the scope and merits of this monumental piece of statistical technique. The author's concluding words, however, may be quoted to indicate his own conception of its purpose and of "the larger aim of population statistic."

At present there exists a large and accumulating mass of unanalysed material. Numerical data have in many instances already become a burden, and in other cases threaten to become one. But when their significance has been penetrated they seem no longer tedious; they have been transformed into illuminating and interesting facts.

Here, however, we need a word of warning. The problem of all so-called knowledge is to subsume what we know—or think we know—under suitable elementary conceptions, conceptions, in fact, that are within our intellectual grasp, and that we can mentally handle. As in physics the Boyle-Charles gaseous laws, the molecular law of equal numbers in equal volumes at equal pressures and temperatures, and the conception of mass as independent of velocity, are but crude statements of the actual facts, so crude that their elementary simplicity entirely disappears when necessary qualifications are made, so likewise does a deeper knowledge of statistic reveal that relations subsisting among crude data are subject to corrections that, not infrequently, are very elaborate. The more simple and obvious of these relations constitute a kind of rough frame-work about which more subtle and accurate conceptions may cluster, or, to change the figure, they are a skeletal foundation on which the body of justly conceived statistic is to be built up.

Anyone who has seriously reflected upon the facts of the last ten decades must realise that, within the next ten, tremendous problems will arise for solution and these will touch fundamentally the following matters, viz.:

(i.) The multiplying power of the human race;
(ii.) The organic constitution of Nature and the means at human disposal for avoiding the incidence of its unfavorable aspects; *i.e.*, eugenics in its wider sense;
(iii.) The enhancing of the productivity of Nature, and the limits of its exploitation;
(iv.) The mechanism of the social organism, and the scheme of its control;
(v.) Internationalism and the solidarity of humanity.

For the adequate study of these matters, not only will the mere technique of the collection and analysis of statistic require to be much advanced, but the popular opinion as to the value of the effort will also have to progress. Given, however, an intelligent public opinion, as to the utility of statistical inquiries, there would be some ground for hope that the great questions, the analysis of which would throw light upon human destiny, could be properly attacked. It is for educational departments, worthy of the name, to create such opinion by the mechanism of their systems, in order that each human being should be sufficiently interested to cordially co-operate, by accurately furnishing the necessary data in the taking of a census of population or wealth. Census-taking is a costly operation, but it is the foundation of all branches of statistic that have a direct human interest. Its value and the facility of using it would be immensely increased if it were meticulously accurate. The importance of technique and of precision, matters apparently of little moment, can be rightly estimated only when the ultimate aim of all statistical inquiry is realised to be 'the study of man's destiny' as the denizen of a world of limitations.

HORACE SECRIST.

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NEW BOOKS

HOFFMAN, F. L. *Army anthropometry and medical rejection statistics.* (Newark, N. J.: Prudential Ins. Co. 1919. Pp. 114.)

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DOCUMENTS, REPORTS, AND LEGISLATION

Industries and Commerce

The Canned Salmon Industry. The report recently issued by the Federal Trade Commission (*Report of the Federal Trade Commission on Canned Foods: Canned Salmon,* Washington, December, 1918, pp. 83, 10c.) shows that in 1917, there were 8,627,453 full cases (414,117,744 pounds) of salmon packed by American canners, over 90 million fish being used in filling this number of cases. The fixed investment in the industry (exclusive of borrowed funds, which amount to almost as much as the fixed investment) is over $31,000,000. The 1917 pack at the August prices was worth approximately $72,000,000.

The location of the canneries and the success or failure of any particular venture depends largely upon the supply of the raw material, fish. The fresh fish are highly perishable and hence the canneries must be located near the fishing grounds. The industry started in California in 1864 and has been moving north ever since. In 1917 approximately 70 per cent of the output was canned in Alaska, and 20 per cent in the western part of Alaska. The canneries are generally located in out of the way places and many Alaska canners must transport all supplies and laborers hundreds of miles to the canneries. This transportation cost is often a material item. In 1917 it averaged 81 cents per case or 16.7 per cent of the total cost of production for the west Alaska canners.

The supply of raw fish is limited by nature and the fish are found abundantly only in certain places. The catch in any particular stream in any particular year is uncertain. As the number of good trap locations is limited, canners controlling such locations have a decided advantage over other canners in being able to secure their raw fish more cheaply. Licenses for trap locations are good for four years in Puget Sound, but for only one year in Alaska. Apparently there would be a scramble for good locations each spring in Alaska. Squatter sovereignty, however, rules and a site is seldom "jumped" as long as the "owner" operates a trap there. The charge for these locations is nominal.

The canners, however, would like to have greater security in their rights to such locations. Two laws were introduced in the last Congress to regulate salmon fishing in Alaska. The Sulzer bill provided for 5-year leases which might be renewed at the end of each period. The Alexander bill provided for 15-year leases, upon the expiration of which the sites could be leased to any applicant by the United States.

The commission expressed itself as opposed to allowing lessees to renew their leases for successive periods in such a way as to keep all others out and also felt that a tenure of fifteen years was too long and would tend towards monopoly.

The successful operation of a salmon cannery depends to a large extent upon the ability to secure an adequate and cheap supply of fish. A canner may secure a large quantity of fish one year and a very small quantity the next. A force of laborers, together with supplies of cans, boxes, fuel, food, etc., sufficient for a season's operations must be provided. In case of a small run of fish, the cans and boxes can be carried over to the next year; but the wages of the laborers, the plant overhead, depreciation and general expenses are practically the same regardless of the size of the pack. This means low unit costs when the pack is large and high unit costs when the pack is small. As a result profits fluctuate widely from year to year. The situation is somewhat different for a canner who is located in a settled community. Such canners often purchase their fish from independent fishermen and are able to secure their labor from nearby towns as needed. However, in case of a small run of fish in this section competition between canners and fresh fish buyers is likely to force them to pay high prices for their fish and they may be unable to secure enough for the efficient operation of their plants.

There is no uniformity in the costs of the different canners. The costs of production (exclusive of marketing expense) in 1916 ranged from $1.85 to $12.27 per full case (48 lbs. of meat) while in 1917 the costs ranged from $1.33 to $26.21. In 1916 the average cost was $3.61 per case. Fifty per cent of the production was canned at costs below $3.50, 18 per cent was packed at costs between $3.50 and $4, and 10 per cent was packed at costs between $4 and $5. The remaining 10 per cent was packed at costs above $5. In 1917 the average cost was $4.43 per case. In this year 53 per cent of the total production was canned at costs below $4.50, 10 per cent at costs between $4.50 and $5, 15 per cent at costs between $5 and $6, 8 per cent at costs between $6 and $7, 7 per cent at costs between $7 and $8, and 9 per cent at costs above $8. The modal cost group was from $3 to $3.50, well below the average, but only 17 per cent of the total fell within this group. (The average cost figures are based on one half of total production. The other cost figures are based on 84 per cent of total production in 1916 and 89 per cent in 1917.)

The plants with large packs have lower costs than the plants with small packs. The report makes a comparison of the costs of produc-

tion at large and small plants, taking a production of 50,000 cases as the dividing point. The large canneries had an average cost 62 cents below the small canneries in 1916 ($3.49 compared with $4.11 per case). In 1917 the costs of the large plants were $1.38 below the costs of the small plants ($4.30 compared with $5.68 per case). The large plants had lower unit costs for every important cost item, but had the greatest advantages in the unit costs of fish and labor.

A canner with several plants may be called a "compound company." The compound company has an advantage over a canner with only one plant ("simple company") in that he can equalize or absorb local losses without incurring a deficit. Thus a company with six plants lost $115,000 at one plant in 1917 and yet made a total profit of over $1,000,000. A large canner is able to own a fleet and thus can transport men and supplies from one plant to another as necessitated by the size of the runs at the different plants. A canner operating several plants is also able to secure the best trap locations and to obtain the seasonal credit needed on better terms than the small canner whose profits are more uncertain. These advantages, however, do not always result in lower costs of production. A comparison of the costs of large and small companies was made, regardless of the production or size of their plants. The large companies secured their fish and containers cheaper than the small companies, while the small companies had lower labor and overhead costs. In 1916 the average cost of 21 small companies was 18 cents below the average cost of 8 large companies. In 1917, however, the average cost of the large companies was 49 cents below the average of the small companies. This was due to the fact that the large companies secured their fish for 75 cents less per case than the small companies. The saving of the small companies on labor and overhead could not overcome this great handicap.

It is clear from these facts, that the large companies are no more efficient in their operation than the small companies and that any advantage that they may possess in the cost of production is in their ability to secure their fish and containers more cheaply. Their advantage in securing fish appears to be due to their control of the best trap locations or the location of their plants in sections where fish are more plentiful. Their advantage in securing containers is based on their ability to negotiate favorable purchase contracts with the can companies, or to manufacture their own cans economically. Concerning large and small companies, the report says:

It seems reasonably clear, then, that the large companies have shown no exceptional efficiency and that their size has redounded to their own advantage

rather than to that of the public. In this industry large and efficient plants rather than large companies, . . . would be socially desirable. A further centralization of control, therefore, could offer no economies which would balance the dangers of monopoly in the industry.

Salmon canners as a rule do not have a large enough volume of sales to justify the maintenance of extensive sales organizations. Many of them are located in small villages and are out of touch with the large markets. For this reason nearly all canned salmon is sold through brokers. Most of these brokers have exclusive sales contracts with several canners. They are then known as selling agents. Such agents often finance the canners and have complete control of the marketing of their product.

Many of these brokers own or directly control one or more canneries, act as selling agent for several canners, and do a general brokerage business for other canners with whom they have no general sales contracts. The report shows that, in 1917, 46 per cent of the canners sold their entire pack through sales agents, 16 per cent sold their entire pack through brokers, and only 3 per cent sold their entire pack direct to jobbers or brokers. The other 35 per cent of the canners did not sell their entire packs in any one way, but it is noteworthy that 66 per cent of the canners effected no direct sales of any of their product.

There are a few large companies or groups of companies which dominate the salmon canning industry. Each of these large companies is connected with a large broker or other kind of distributor. These brokers control the sale of the product of a number of canning companies. The large companies often own stock and make loans to other companies. The stockholders in one company frequently control other companies. In these ways many canners are closely bound together into groups dominated by one company or one man. There were five such groups which in 1917 packed 53 per cent of the year's production. Some of the Chicago meat packers have extensive interests in the salmon canning industry and at least two of the above groups are dominated by Chicago meat-packing firms.

Very few of the Pacific coast salmon brokers have sales organizations extending over the country and consequently they effect their sales through brokers located in other cities, paying them a sub-brokerage. The ordinary brokerage on canned salmon is 5 per cent (although commissions of from $2\frac{1}{2}$ to $13\frac{1}{2}$ per cent were reported), about one half of which is paid out as sub-brokerage. A few canners have established direct connections with Eastern brokers and so have to pay only $2\frac{1}{2}$ or 3 per cent brokerage. The commission did not

believe that it was practical for the canners to sell direct to the wholesale grocers but did think it practical for the medium and large sized canners to establish direct connections with Eastern brokers and to reduce the amount of brokerage paid by one half.

The canned salmon industry offers an example of an industry in which the larger companies determine the prices which are followed pretty closely by all producers. In August "opening prices" are named at which the canners will "open" business for their goods then being packed. Since 1905 nearly all canners naming opening prices have followed the prices made by the Alaska Packers' Association or by the brokerage firm of Deming & Gould.

The Alaska Packers' Association generally names prices for all grades except sockeyes, the price of which is usually named by Deming & Gould. The Alaska Packers' Association is principally interested in the Alaska product, while Deming & Gould have very large interests in Puget Sound, where the costs are higher. For this reason Deming & Gould opened prices on all grades in 1917. Although the president of the Alaska Packers' Association was in favor of somewhat lower prices he followed those named by Deming & Gould in order not to demoralize the market. The weighted averages of the opening prices per full case were $5.14 in 1916 and $8.33 in 1917, or an increase of 62 per cent. The increase in the average cost of production was 23 per cent. The 1916 opening prices were high enough to cover the cost of production and selling for approximately 87 per cent of the season's pack, while the 1917 prices would allow approximately 94 per cent of the year's production to be sold without a loss.

The Alaska Packers' Association with its affiliated companies packed 18.4 per cent of the total production in 1917 and the Deming & Gould group of companies packed 11.4 per cent. These two groups of companies together packed only 30 per cent of the entire year's production. Yet the prices named by one of these companies on a particular grade is followed by practically the entire industry. This shows how a company, larger than any of its competitors, even though controlling only a small part of the total production can determine the prices for the entire industry.

Prices high enough to yield a profit on 90 per cent of the total product mean very high prices for most producers. The average net profit on investment was 22.1 per cent in 1916 and 52.7 per cent in 1917. The average net profit on net sales was 18.5 per cent in 1916 and 34.1 per cent in 1917. As the range of costs was great, the net profits of individual canners naturally varied widely. Out of the 76 companies reported upon in 1916, ten showed a loss and 66 showed

a profit. Out of the 66 showing a profit, 33 made over 25 per cent and 3 made over 100 per cent on investment. The largest loss was 70 per cent and the highest profit was 168 per cent. Out of the 90 companies reported upon in 1917, 12 showed a loss and 78 showed a profit. Of the 78 showing a profit, 33 realized over 50 per cent and 11 made over 100 per cent on investment. The greatest loss reported was 69 per cent, while the highest percentage of profit realized was 239.

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The Bureau of Foreign and Domestic Commerce of the United States Department of Commerce has recently issued the following volumes:

Special Agents Series:

No. 172, *Electrical Goods in China, Japan, and Vladivostok,* by R. A. Lundquist (Washington, 1918, pp. 197). This contains an analysis of markets for electrical goods and methods of conducting trade in these countries. It also has considerable general economic information in regard to the Orient.

No. 173, *Shoe and Leather Trade in China and Japan,* by C. E. Bosworth (pp. 37).

No. 174, *Markets for Boots and Shoes in Chile and Bolivia,* by H. G. Brock (pp. 192). This, like the previous issues, has general economic and commercial description.

No. 175, *Construction Materials and Machinery in Chile, Peru, and Ecuador,* by W. W. Ewing (pp. 205).

No. 176, *Furniture Markets of Chile, Peru, Bolivia, and Ecuador,* by H. E. Everly (pp. 165).

Miscellaneous Series:

No. 64, *Wholesale Prices of Leading Articles in the United States Markets,* 1917 (pp. 14).

No. 70, *The Conduct of Business with China* (pp. 47).

No. 74, *Wearing Apparel in Peru,* by W. F. Montavon (pp. 64).

Other reports of the Department of Commerce are *Annual Report of the Secretary of Commerce, 1918* (pp. 157), and *Annual Report of the Commissioner of Fisheries, 1918* (pp. 94).

The United States Tariff Commission has published as Tariff Information Series No. 9, *Costs of Production in the Sugar Industry* (Washington, 1919, pp. 55). The pamphlet is intended mainly to show (1) the effects of the war upon sugar costs and prices, (2) the

necessity for government price regulation, (3) the probable effects of recent and proposed tariffs and excise taxes upon sugar costs, prices and production in the various continental and insular sugar areas of the United States and in Cuba. It carries to the close of the sugar year of 1917-1919 much of the data contained in three previous official reports, namely, *The Sugar Industry*, issued by the United States Department of Commerce in 1913, *The Cane Sugar Industry*, issued by the same department in 1917, and *The Beet Sugar Industry in the United States*, issued by the Federal Trade Commission in 1917.

ROY G. BLAKEY.

The United States Tariff Commission has also published a monograph on *Japan: Trade During the War*, which covers the years 1913-1917 with special reference to commerce with the United States. The report is divided into three sections: development of Japan's foreign trade prior to the war, going back to 1856; expansion of Japan's foreign trade during the war; and trade between Japan and the United States. Another volume, *Reciprocity and Commercial Treaties* (pp. 535), will receive more adequate notice in the next issue of the REVIEW.

The *Second Annual Report of the United States Tariff Commission for 1918* (Washington, 1919), gives in Appendix 4 specimens of tariff information catalogs on which the commission has been for some time engaged. Those reprinted deal with: bleaching powder (pp. 47-58); cotton gloves (pp. 59-74); quicksilver (pp. 75-94); rails (pp. 95-118). These catalogs will be of great value to students of commercial and manufacturing conditions. They contain a description of the industry and processes, imports and exports, world production, analysis of competitive conditions with brief bibliographies. Several pages are devoted to a list of the catalogs which are under preparation.

The Bureau of the Census has published Bulletin 137, *Cotton Production and Distribution, Season of 1917-1918* (Washington, 1918, pp. 135). There are maps showing the amount of cotton ginned in the several states in 1917.

The *Annual Report of the Chief of the Bureau of Foreign and Domestic Commerce* for the fiscal year ended June 30, 1918 (Washington, pp. 93), summarizes the work of the various divisions of the department.

The Annual Report of the Commissioner of Navigation for 1918 (Washington, pp. 237) reviews the progress of ship construction during the preceding year.

The hearings held in December and January before the House

Committee on Interstate and Foreign Commerce on *Government Control of the Meat-Packing Industry* have been issued in two parts (pp. 215).

The testimony of J. Ogden Armour on behalf of Armour and Company, January 21, 1919, in the investigation of the packing industry has been published as a reprint by the Armour Company (pp. 64).

The *Second Annual Report of the United States Shipping Board* gives a full account of the activities of this board and also of the Emergency Fleet Corporation (December 1, 1918, pp. 212). A report by the chairman of the board, Edwin N. Hurley, on *World Shipping Data: Report of European Mission* (Washington, Mar. 1, 1919, pp. 32), presents data in regard to shipbuilding costs abroad. Also a series of pamphlets has been issued as follows:

Why Our Ships Will Now Stay on the Ocean, by E. N. Hurley (pp. 14).

World Trade, a List of Books on World Trade (1918, pp. 8).

Ships and the Ocean, a List of Books on Ships, Commerce, and Merchant Marine, (1918, pp. 7).

Part 8 of the hearings before the Senate Committee on Commerce, relating to the *United States Shipping Board Emergency Fleet Corporation,* contains the testimony of Matthew C. Brush, president of the American International Shipbuilding Corporation (Washington, 1919, pp. 407), and presents many interesting photographs and charts.

The United States Department of Agriculture has issued the following bulletins:

No. 721, *The Beet Sugar Industry in the United States,* by C. O. Townsend (Nov. 22, 1918, pp. 56).

No. 726, *Farm Practice in Growing Beets for Three Districts in Colorado, 1914-1915* (pp. 60).

No. 742, *Production of American Egyptian Cotton* (pp. 30).

No. 755, *Geographical Phases of Farm Prices: Oats,* by R. B. Zapoleon (pp. 28). This has maps showing the usual geographical variations in producers' prices within the United States and the normal geographical variations in producers' price.

No. 770, *Motor Transportation for Rural Districts,* by J. H. Collins (pp. 32).

The American Relief Administration, of which Mr. Herbert Hoover is director, has issued Bulletin No. 1 on *German Food and Trade Con-*

ditions, by A. E. Taylor and Vernon Kellogg (New York, 115 Broadway, Apr. 15, 1919, pp. 24).

The *Report of the New York State Food Commission* for the period October 18, 1917, to July 1, 1918 (Albany, 1919, pp. 153), contains a supplementary report for the period ending November 1, 1918. The various phases of food conservation are described.

The Agricultural Experiment Station of the University of Wisconsin has issued a small bulletin, No. 300, on *War Prices and Farm Products*, by H. C. Taylor and S. W. Mendum (Madison, Mar., 1919, pp. 18). It is illustrated by charts showing incomes and receipts of farmers.

The Bureau of the Census has published in the Census of War Commodities series, *Iron and Steel Products* (Washington, pp. 16).

The Bureau of Mines has prepared a collection of typewritten sheets giving excerpts from monthly reports on minerals investigations (Feb., 1919, pp. 43) and containing tables and charts in regard to the production of various minerals.

Corporations

Proposals for a Solution of the Railway Problem. In 1916 Congress appointed a joint committee of five Senators and five Representatives, to prepare a report on the questions of government regulation, railroad efficiency, and nationalization. Hearings were held during 1916 and 1917, but our entry into the war put the matter off indefinitely. Chairman Newlands of the joint committee died late in 1917, and the committee reported briefly to Congress in March, 1918, that no final report would be presented.

In the meantime came the urgent necessity, with the prospect of peace in 1919, that Congress should seek a definite solution of the railway problem. By the Railroad Control act of March 21, 1918, the railways pass out of the hands of the government not later than twenty-one months after the declaration of peace, or by the middle of 1921 at the latest. The railway problem had changed since 1916, some of the difficulties being aggravated, while many new ones were superadded as a result of the war and federal control. Students and observers of the transportation question agreed generally that the time was ripe for a constructive and radically different policy of railway regulation. But what policy?

To secure light on this question the Senate Committee on Interstate Commerce in January and February of this year gave consideration to various plans. Some of the proposals were elaborated in detail before

the committee. Some were formulated as general principles underlying a correct solution, while others took the form of manuscripts filed with the committee. Still others were not formally presented to the committee, but appeared as public addresses, pamphlets, and periodical articles. Some forty separate proposals may be listed as the product of study of the railway problem during the past two years. The problem is still under discussion, and a complete story of the discussion cannot be attempted as yet, but a few of the more elaborate plans laid before the Senate Committee may be singled out for brief analysis here.

Director General of Railroads Walker D. Hines developed a series of proposals during several days' sessions of the committee. The Interstate Commerce Commission sent a representative who spoke authoritatively for that body, only one member of the commission dissenting in part from the presentation. State commissions were heard through three representatives. The railways presented a series of recommendations through officers of the Association of Railway Executives. Railway security holders were represented by men who appeared for two associations of the stockholders and bondholders. Railway labor received a hearing in the persons of representatives of the trainmen's brotherhoods and smaller organizations. Purchasers of transportation service, the shippers, were heard, and presented a number of plans. Several bankers either filed recommendations with the committee, or developed their proposals through outside channels.

Although the plans varied at many important points, analysis reveals the striking fact that the majority of them agreed on a number of underlying principles. There was unanimity regarding the gravity of the problem and the vital necessity of prompt and thorough action. It was recognized that the nation could not survive the post-war period of readjustment without an adequate transportation system, ready and able to meet the demands upon it. Furthermore, there was wide agreement that railway regulation should be fuller and stricter than before. The demand for federal supervision over the issuance of railway securities was voiced in nearly all proposals. There was a fairly consistent demand, except on the part of the state commissions, that burdensome regulation of railway operation and rates by the several states give place to a strong policy of federal regulation of all but local matters. That the railways should be allowed greater freedom of combination and merger, and should be encouraged to a joint use of their facilities whenever in the public interest, was another note struck by a number of proponents. This proposal was made in full recognition

of the fact that it would involve modification of the anti-trust laws, so far as the railways are concerned.

There were, however, many points of difference. The first concerns the future policy of the American people regarding the transportation industry. Shall it remain under private initiative? Shall it be nationalized outright? or, Shall there be a partial step toward nationalization? With but few exceptions, the trend was sharply in the direction of a continued policy of private ownership and operation. Glenn E. Plumb, appearing as an attorney of various railway labor organizations, elaborated a plan whereby the government would purchase the railways and turn them over to labor for operation. Two other men appeared to urge government purchase and operation. With these exceptions, private ownership and operation was generally advocated by the witnesses. Director General Hines, for example, said:

> I do not personally believe in Government ownership. I believe there can be a form of radically reconstructed private ownership, with such close Government supervision, including Government representation on the boards of directors, as will give the public and labor all the benefits of Government ownership and at the same time will preserve the benefits of private and self-interested initiative and will avoid the political difficulties which perhaps are inseparable from Government ownership.

The Interstate Commerce Commission expressed itself as follows:

> Considering and weighing as best we can all of the arguments for and against the different plans, we are led to the conviction that with the adoption of appropriate provisions and safeguards for regulation under private ownership it would not be wise or best at this time to assume Government ownership or operation of the railroads of the country.

As to the form which railway control should take, there was diversity of opinion. The railway executives advocated the creation of a new Department of Transportation, whose head should be a member of the President's Cabinet. Under this plan the Interstate Commerce Commission would no longer have administrative power, which would pass into the hands of the Secretary of Transportation, while the commission would retain its quasi-judicial functions. The other plans for the most part advocated the retention of the commission, with usually a plea for the extension of its powers, even to the exclusion of state intervention. The Interstate Commerce Commission advocated cooperation between "the federal tribunal" and state authorities through the utilization of the services of the latter by the former "in appropriate instances and to an appropriate extent." Regional commissions operating under the direction of the interstate body were advocated in several plans, such as that of the railway executives, and the plan proposed by S. Davies Warfield of the National Association of Owners of Railroad Securities.

Another point was the consolidation of railways into a limited number of large systems, with a more extensive common use of equipment, terminals, and other joint facilities. Director General Hines advocated regional railway systems. The Interstate Commerce Commission argued for a revision of the limitations upon the united or cooperative activities of common carriers, and advocated mergers to such extent as may be necessary in the general public interest. The railway executives proposed federal incorporation, with a provision for such mergers as should be approved by the Secretary of Transportation.

With regard to rates, recognition was given to the necessity that they should be adequate, although the proposals varied as to the extent to which there should be a definition of adequacy or reasonableness. Director General Hines emphasized the idea of a fair return to the railways, rather than that of reasonableness of rates. He proposed that the government should guarantee a fair return, making up any deficit on the one hand and sharing in excess profits above the return on the other hand. This would shift the burden of securing an adequate rate level from the railways to the government. The Interstate Commerce Commission argued that rates should be such as to provide adequate revenues. The railway executives proposed that there should be statutory provision for adequacy of rates, the term adequacy to cover wage costs and other expenses. The Warfield plan provided that the law should specifically prescribe such a rate level as, adjusted from time to time, should produce an average return of 6 per cent on invested capital. The Plumb or labor plan proposed that rates be adjusted on a sliding scale basis, and be reduced whenever profits rise above 10 per cent of gross operating revenues.

Various proposals were made for the adjustment of wages. The railway executives advocated a tripartite board representing the railways, the employees, and the general public, to investigate wage disputes and make recommendations to the Secretary of Transportation. The Warfield plan vested the duties of a board of conciliation in each of the proposed regional commissions, and provided for the creation of boards of arbitration, with right of appeal to the Interstate Commerce Commission. The labor plan provided for wage boards whose decisions should be final.

Looking over the various proposed plans as a whole, it is clear that they group themselves into three distinct classes. The first group is composed of the plans that depart the least from the general principles underlying railway regulation and operation in the past. These plans recognize the weaknesses of the régime existing prior to federal con-

trol, and seek the elimination of the weak points. They provide for no government partnership in railway affairs, but only such strengthening and unification of government regulation, such modification of undesirable restrictions, and such establishment of a definite rule for rate making, as will result in a strong, well-knit, and efficient transportation system. The railways will continue to benefit from the results of their own operation when efficient, and will suffer when inefficient; the government undertakes no direct financial responsibility. In this group of proposals the most notable are the plans submitted by the Interstate Commerce Commission, the railway executives, and Mr. Warfield of the security holders.

The second group of proposals provide for government partnership to the extent of a guaranteed return on railway investment or capital. The railways still operate their own properties and retain many of the benefits and incentives of private initiative, but the government becomes a silent partner to the extent that it shoulders a certain amount of financial responsibility. It follows that the government will participate in the management, either through representation on the boards of directors or otherwise. In this group are the proposals of Mr. Hines and several of the plans proposed by bankers, providing for a government guarantee, with participation in the profits.

The third group of plans provide for government ownership outright. Aside from two or three general proposals of such a solution, only one definitely elaborated plan of government ownership was presented, that of Mr. Plumb, appearing for railway labor. Even this plan, advocating government purchase of railway properties, does not advocate government operation, but would turn the railway system over to an operating corporation, administered by a board of directors elected in part by railway employees and appointed in part by the President. In brief, the only definite plan of nationalization does not provide for direct operation by the government.

As illustrative of these three groups of plans, the following brief outlines are presented of one plan in each group, the railway executives' plan from the first group, the Hines plan from the second group, and the Plumb or labor plan from the third.

The plan of the railway executives may be indicated as follows:

1. Private ownership and operation.
2. Federal incorporation.
3. Exclusive federal regulation of rates, and supervision of security issues.
4. No new construction except when and as needed.

5. A Department of Transportation, which shall
   (a) recommend policies,
   (b) re-route traffic when necessary,
   (c) readjust the use of terminal facilities, and
   (d) unify the transportation system in a national emergency.
6. Transfer of the executive and administrative powers of the Interstate Commerce Commission to the Secretary of Transportation, the commission to retain quasi-judicial functions, especially as to the reviewing of rates.
7. Carriers to initiate rates, subject to the approval or disapproval of the Secretary of Transportation, who may refer questions to the commission for review. The commission may also hear complaints respecting rates, and shall fix minimum as well as maximum rates.
8. A reasonable, adequate, and sufficient rule of rate making to be specified by statute.
9. Regional commissions to be created under the supervision of the Interstate Commerce Commission.
10. Modification of the Clayton Anti-trust act, and of the limitations on pooling of cars, division of earnings, acquisition of interest in other carriers, rate agreements, and the like.
11. Wage boards to be organized when necessary, and wage costs to be recognized in rate making as an expense.

The Hines plan presented the following fundamentals:

1. Existence of numerous railroad corporations with widely varying financial structures no longer possible.
2. Abolition of the "strong and weak corporation" menace to railway credit and efficiency.
3. Participation of the government, and perhaps of labor, in profits in excess of a comparatively moderate return.
4. Guarantee by the government of a fair return to the railways, with moderate participation in profits in excess of that return.
5. The guaranteed return to be sufficient to preserve railway credit and attract additional capital.

The Plumb plan provided for:

1. Government purchase of railway properties, on the basis of a fair valuation.
2. Operation by a corporation. Other than working capital furnished by the government, the sole capital of this corpora-

tion would be the "operating ability of every employee, from president down to office boy."

3. The board of directors of the operating corporation to be composed one third of directors elected by the appointed railway officials, one third by other employees, and one third appointed by the President of the United States.
4. Rates to be fixed, presumably by the Interstate Commerce Commission, so as to produce operating revenues sufficient "to meet the requirements of the service."
5. Profits to be divided equally between the government and the operating corporation, the latter to pay its share to labor as a dividend.
6. Automatic reduction of rates whenever the government's share of profits are in excess of five per cent of the operating revenue.
7. Control of intrastate traffic left in the hands of local authorities whenever it does not interfere with the proper operation of interstate traffic.
8. Wage settlements through wage boards and boards of adjustment.

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ANNUAL REPORT OF DIRECTOR GENERAL OF RAILROADS. W. G. McAdoo has issued nine sections of his annual report for 1918 as Director General of Railroads (Washington, 1918-1919, pp. 159). The sections cover respectively operation, traffic, wages and working conditions, capital expenditures, public service and accounting, suggestions and complaints, law, and inland waterways. An additional section, covering the work of the division of finance and purchases, is in press as this note is written.

The longest section is that on operation, covering 62 pages. It recounts the operating problems faced by the Railroad Administration at the beginning of 1918 and tabulates the results in terms of improvement in coal supply, food distribution, freight congestion, and in the export situation. To accomplish these results, terminals were unified, freight was hauled by the most direct routes, solid freight trains were created, passenger trains were reduced in number, freight cars and car repair shops were virtually pooled, a coal zoning plan was established in coöperation with the Fuel Administration, and other steps were taken toward unification and economy.

As to equipment, plans were drawn for semi-standardized locomotives and freight cars, orders being placed for 1,430 locomotives and 100,000 freight cars of the standardized types. The Car Service Section dealt principally with problems of car handling and forwarding. This section also supervised freight embargoes and permits, the latter being largely of the nature of exemptions from embargo.

The Safety Section was a unit of the Division of Operation; also the Troop Movement Section, which handled 6,496,150 men between January 1 and the armistice, or nearly 21,000 per day; also the Operating Statistics Section, which established statistical standards, compiled the returns, and served as a general clearing house of information; also the Telegraph Section, the Fuel Conservation Section, and the Exports Control Committee, whose functions are indicated by their titles.

The section on traffic is devoted largely to traffic economies and restrictions. Consolidated ticket offices replaced passenger offices formerly in existence, passenger trains were eliminated, time-tables were abridged and advertising curtailed. Uniform methods were installed in respect to many practices, rules and regulations, and the like.

To conserve the car supply, virtually prohibitive demurrage charges were made effective, to prevent shippers from holding cars longer than was absolutely essential.

The most important part of the section on traffic, from the public viewpoint, deals with increased freight and passenger rates. The increases were for the purpose of providing "for the increase in wages allowed, the higher prices that were and are being paid for all materials and supplies, and the rising costs of operation generally." Freight rates were raised 25 per cent in June, and passenger rates about 30 per cent. In addition, express rates were raised 10 per cent in July, and again about 10 per cent on January 1, 1919. In addition, there were changes in individual rates and traffic rules, and consolidation and simplification of tariffs, which affected the rate level. Another activity of the Division of Traffic was to work out a consolidated freight classification, applicable throughout the United States. This classification has not yet received the approval of the Interstate Commerce Commission.

The Division of Labor provided a means to settle questions as between railway officials and employees. The report of the division, probably prepared by its director, a former union chief, rather critically reviews past arbitrations of labor disputes and their results.

General Order No. 27, issued on May 25, increased the wages of all employees earning less than $250 per month, and created a Board of Railroad Wages and Working Conditions, composed equally of railway and labor representatives. This board investigated inequalities or inequities growing out of the general wage increase, and made recommendations to the Director General. Its labors resulted in a number of supplements, amendments, and addenda to General Order 27. Three Boards of Adjustment were also created. The report further discusses progress made during the year in the direction of standardization: standardization of wages, of hours of labor, and of other conditions of employment, such as rules of discipline and maintenance of the seniority principle.

The Division of Labor early took up the question of the closed shop versus the non-union shop, its recommendations being embodied in General Order No. 8, issued February 21, which provided that "no discrimination will be made in the employment, retention, or conditions of employment of employees because of membership or non-membership in labor organizations." Following the issuance of this order new unions were organized on a number of roads.

An important feature is the report of the Women's Service Section, organized August 28. The number of women in railway service grew from 60,555 on January 1, 1918, to 101,296 on October 1. About three fourths were engaged in clerical work. The work of the section was devoted mainly to supervising the hours and working conditions of the women, and to guarding the enforcement of labor laws.

The brief section on capital expenditures outlines the nature of improvements to railway plant and equipment authorized to December 31, 1918, amounting to $1,278,815,000, and the amount actually expended to November 30, less than half the authorized sum.

Under the head of accounting are outlined the necessary accounting changes and standards brought into play by the fact of federal control and operation. The government having leased railway property from several hundred different corporations, elaborate and detailed accounting methods were made necessary, so as to keep the financial relationships between the government and each corporation on a clear and accurate accounting basis.

The Division of Law devoted itself principally to devising a standard form of lease contract between the government and the several railway companies. The division also supervised the taking over or relinquishment of railway lines, handled claims for special compensation in excess of the guaranteed standard return, and attended to general claims and other legal matters.

The section on inland waterways is devoted to the management and results of operation of the several waterways taken over. Results were meager for the most part, although the supplementary service rendered by some of the canals was locally of value. JULIUS H. PARMELEE.

Washington, D. C.

The Bureau of Railway Economics has prepared a typewritten list of references to articles on *Plans Proposed for Future Control and Operation of Railroads* (Washington, Mar. 31, 1919, pp. 25); also a list of books pertaining to government ownership of railways, being a supplement to Bulletin 62. This covers the period between January, 1917, and March, 1918 (typewritten, pp. 38).

The railway question is covered by hearings before the Senate Committee on Interstate Commerce on *Government Control and Operation of Railways,* Parts 1-7 (Washington, 1918, pp. 1338). This testimony covers the period between December, 1917, and January, 1918. Hearings before the Subcommittee on the Committee on Interstate Commerce on *Long-and-Short-Haul on Railroads* held March 14, 1918, have also been printed (Washington, pp. 733). The memorandum submitted to this committee on *Government Control of Railways in Great Britain* appears in a separate pamphlet (Washington, 1918, pp. 56); also *Federal Control of Systems of Communication,* a hearing held July 9, 1918 (pp. 57). Further hearings before this committee, on *Extension of Tenure of Government Control of Railways,* covering the period from January 3, to February 14, 1919, appear in ten parts.

The *Statement of Mr. Samuel Rea,* president of the Pennsylvania Railway System, before the Interstate Commerce Committee, February 20, 1919, has been printed as a separate (Philadelphia, pp. 16).

The New York and Washington Association of Railway Executives has published a preliminary edition of the testimony before the Senate Committee in a volume entitled *Remedial Railway Legislation, 1919* (pp. 279). This has been followed by a supplement containing testimony by J. Kruttschnitt and D. E. Willard(pp. 98).

Among public utility reports have been received:

Twenty-fourth and Final Report of the Boston Transit Commission, June 30, 1918 (Boston, pp. 65).

The Report of the Public Service Commission of Maryland for 1918 (Baltimore, pp. 663).

Wisconsin Railway Commission Reports, Vol. 19 (Mar. 9, 1917-Nov. 12, 1917, pp. 115).

Sixth Annual Report of the State Corporation Commission of New Mexico, 1917 (Santa Fe, pp. 116).

Labor

METHODS OF COMPUTING LABOR TURNOVER. The recent discovery of the extent and costs of labor turnover has brought with it varying methods of computation. In order that a standard practice might be adopted, the National Association of Employment Managers at their annual meeting in May, 1918, adopted the following method[1] which has since been approved by the United States Bureau of Labor Statistics as the basis for its investigations.[2] "To compute the percentage of labor turnover for any period, find the total separations for the period considered and divide by the average of the number actually working each day through the period."

Before criticising this method it is necessary to determine just what is meant by "turnover." Labor turnover is simply the number of men hired by a given business unit to take the places of men who have left. Turnover in this sense is exactly similar to the use of the term by any retail merchant to indicate the disposal of certain units and their replacement by other units.[3] Turnover as such does not begin until replacement occurs.

The percentage of labor turnover is the proportion which these newly hired men who actually replace others form of the average force employed in a given period of time. It indicates the percentage of men which it has been necessary to hire in order to maintain a constant labor force. In itself it indicates nothing as to whether the force itself is being increased or decreased.

In the light of this definition (which I believe would be approved by every student of the problem), the method of computation adopted by the Bureau of Labor Statistics is defective in the following ways:

1. It uses separations rather than replacements as the basis of turnover. The definition of turnover adopted by the Employment Managers Association is indeed as follows:

[1] For a full statement of this report see *Monthly Review*, United States Bureau of Labor Statistics, June, 1918, pp. 172-173. That this method did not introduce uniformity may be seen from the symposium on labor turnover in *Industrial Management*, September, 1918, pp. 239-246 and November, pp. 425-26, in which from five to six different methods were advanced, practically all of which, in the opinion of the author, are wrong.

[2] See "Labor turnover in Cleveland and Detroit," by Boris Emmett, *Monthly Review*, Jan., 1919, pp. 11-30; "Labor turnover in the San Francisco Bay region," by Paul F. Brissenden, *Monthly Review*, Feb., 1919, pp. 45-62.

[3] With the exception, of course, that a high labor turnover means an economic loss to the employer, while a high turnover of goods means an economic gain to the merchant.

"Labor turnover for any period consists of the number of separations from service during that period. Separations include all quits, discharges, and lay-offs for any reason whatsoever."

It is true that in a period in which the working force of the given plant is being increased, separations do roughly constitute the amount of turnover which takes place. Men are being hired not only to increase the net working force, but to take the place of those who have left. It is only in the latter sense that they constitute replacements and enter into turnover. Separations in this case, therefore, do approximately measure replacements. To be absolutely accurate, however, one should subtract the vacated positions which have not been filled from the total separations to secure the number of actual replacements. Such a deduction, however, although ideally necessary may not be practically possible in many instances due to insufficient payroll data.

But the case is different if the labor force is decreasing. Suppose that a given plant decreases its force in a given period of time from 1,000 to 900 and hires no new men. There are 100 separations but no new men have entered the plant. Turnover as such has not occurred. Yet the method adopted by the Bureau of Labor Statistics would show a labor turnover of 100 men. Plainly, therefore, in this case separations do not measure replacements. The number of men newly hired do constitute replacements. It is not correct, moreover, in the case of a declining labor force to deduct the positions vacated but not replaced from number newly hired since those newly hired have replaced some workers even if they have not replaced the particular ones whose positions are vacated.

The proper method, therefore, of determining replacements should take:

a. The number of separations actually replaced as the base in the case of an increasing force.

b. The number newly hired as the base in the case of a decreasing force.

2. It uses the average attendance as the denominator instead of the number actually employed, by the company. The best index of the average number actually employed is not the average attendance but the average number on the payroll.[4] The use of the average attendance as the denominator confuses absenteeism with turnover. Recent investigations show that from 6 to 15 per cent of the working force are

[4] Care should be taken that the payroll does not contain "dead wood," or men who have really left the employ of the company.

absent daily. Yet these men fill positions which are part of the working force and consequently should not be disregarded in computing the average working force. Absenteeism should be treated as a separate item in labor loss and not included in the computation of turnover.[5]

The preceding paragraphs indicate the methods which I believe should be followed: To compute the percentage of labor turnover for any period, find the total replacements for the period considered and divide by the average number on the payroll.

The difference between the method proposed by the author and that adopted by the Bureau of Labor Statistics may be seen from the following two non-algebraic examples:

Example A

COMPUTATION OF LABOR TURNOVER WITH AN INCREASING LABOR FORCE.

1. Given statistics:
   Number employed at beginning of month 1,000.
   Number employed at end of month 1,100.
   Number newly hired 300.
   Number positions vacated not filled 10.
   Average daily attendance 900.
2. Method of Bureau of Labor Statistics:
   Number of separations = 300 — (1100-1000) = 200.
   $$\text{Labor turnover} = \frac{200}{900} = 22.2 \text{ per cent.}$$
3. Method proposed:
   $$\text{Average force on payroll} = \frac{1000 + 1100}{2} = 1050.^{6}$$
   Number of replacements = 300 — (1100-1000) — 10 = 190.
   $$\text{Labor turnover} = \frac{190}{1050} \text{ or } 18.1 \text{ per cent.}$$
   $$\text{Percentage of absenteeism} = \frac{150}{1050} = 14.3 \text{ per cent.}$$

Example B

COMPUTATION OF LABOR TURNOVER WITH A DECREASING LABOR FORCE.

1. Given statistics:
   Number on payroll at beginning of month 1,000.
   Number on payroll at end of month 900.
   Number newly hired 25.
   Average daily attendance 800.

[5] Mr. Boris Emmett, an investigator for the United States Bureau of Labor Statistics, in his article on the "Nature and computation of labor turnover," *Journal of Political Economy*, Feb., 1919, pp. 105-117, has come to believe in the use of hirings rather than separations in a decreasing work force, but he still clings to the use of the average attendance as the denominator. One of his objections to the use of the payroll is that it contains absentees. Of course it does, but these can be computed separately and should not be confused with turnover.

[6] That is, the arithmetic average of the number employed at the beginning and end of the month. The number each week can be averaged if more accurate methods are desired.

2. Method of Bureau of Labor Statistics:

Number of separations = 25 + (1000-900) = 125.

$$\text{Labor turnover} = \frac{125}{800} \text{ or } 15.6 \text{ per cent.}$$

3. Method proposed:

$$\text{Average number on payroll} = \frac{1000 + 900}{2} = 950.$$

Number of replacements = 25.

$$\text{Labor turnover} = \frac{25}{950} \text{ or } 2.6 \text{ per cent.}$$

$$\text{Percentage of absenteeism} = \frac{950 - 800}{950} \text{ or } 15.8 \text{ per cent.}$$

It will be noticed that the use of this method results in a much lower turnover rate which is especially true in the case of a decreasing labor force.

The labor turnover for a given period should be reduced to a yearly basis in the same fashion that the Public Health Service reduces mortality and morbidity statistics to a yearly rate. If the given period is a month, the percentage should be multiplied by 12; if a week by 52. Care should be taken: (a) that the replacements listed should not include former employees newly hired for their old positions; (b) that the statistics be compiled for departments and trades as well as for the plant as a whole.

Emergency Fleet Corporation,
Philadelphia, Pa.

PAUL H. DOUGLAS.

The Central Bureau of Planning and Statistics has prepared a typewritten pamphlet to show the principal sources of *Labor Statistics* (Washington, Mar. 19, 1919, pp. 67), which have been compiled by federal and state agencies. Sources are grouped under the following headings: accident compensation and insurance; accidents; cost of living; disputes and settlements; employment; employment agencies; factory inspection; hours of labor; housing; labor costs; labor demand and supply; labor organizations; labor turnover; occupational diseases; productivity of labor; unemployment; vocational education; wages; and welfare work.

The federal Bureau of Labor Statistics has issued the following bulletins:

No. 233, *The Operation of the Industrial Disputes Investigation Act of Canada,* by B. P. Squires (pp. 150) which contains a two-page bibliography.

No. 253, *Women in the Lead Industries,* by Alice Hamilton (Feb., 1919, pp. 38).

The Training and Dilution Service of the United States Department of Labor has for distribution a pamphlet on *British Methods of Training Workers in War Industries* (Washington, 1918, pp. 68); also pamphlets on *How Training Departments have Bettered Production* (1919, pp. 23); *How to Start a Training Department in a Factory* (pp. 24); and *A Successful Apprentice Toolmakers' School* (1919, pp. 8).

The Children's Bureau of the federal Department of Labor has issued a bulletin on *The States and Child Labor* giving lists of states with certain restrictions as to ages and hours (Washington, 1919, pp. 46); also *The Employment Certificate System a Safeguard for the Working Child* (pp. 12); and a monograph on *Infant Mortality*, results of a field study in Brockton, Mass., based on births in one year, by Mary V. Dempsey (Washington, 1918, pp. 82).

The Department of Labor has published a report of a survey by the Women in Industry Service on *Labor Laws for Women in Industry in Indiana* (Washington, Dec. 31, 1918, pp. 29).

State labor reports have been received as follows:

Fifth Annual Report of the State Board of Labor and Industries of Massachusetts (Boston, 1918, pp. 81).

Twelfth Annual Report of the Public Employment Offices of Massachusetts (Boston, Bureau of Statistics, 1919, pp. 34).

Thirty-second Annual Report of the State Board of Arbitration of Massachusetts, 1917 (Boston, 1918, pp. 213).

Labor Legislation in Massachusetts, 1918, with Index to Bills Affecting Labor (Boston, Bureau of Statistics, Oct. 1, 1918, pp. 95).

Twenty-first Annual Report of the Bureau of Labor and Industrial Statistics of Virginia, 1918 (pp. 80).

Labor Laws of the State of Tennessee (Nashville, Tennessee Department of Workshop and Factory Inspection, 1918, pp. 53).

Kansas Labor Laws and Laws Especially Affecting the Employment of Labor, annotated and compiled for the State Department of Labor and Industries by Richard MacIntosh (Topeka, 1918, pp. 258).

Biennial Report of the State Industrial Commission of Oklahoma, September, 1916, to August, 1918 (Oklahoma City, pp. 18).

Eighteenth Biennial Report of the Bureau of Labor Statistics of California (Sacramento, pp. 470).

General Report of the Minister of Public Works and Labour of the Province of Quebec (Quebec, 1918, pp. 185).

The Department of Labor of New York has issued bulletins: Janu-

ary, 1919, *A Plan for Shop Safety Sanitation and Health Organization;* February, *Weekly Earnings of Women in Five Industries;* March, *The Industrial Replacement of Men by Women in the State of New York.*

The Minimum Wage Commission of Massachusetts has made a supplementary report of *Wages of Women in Candy Factories in Massachusetts* (Boston, 1919, pp. 42).

Money, Prices, Credit, and Banking

THE EQUATION OF EXCHANGE FOR 1918, as calculated by the usual method, with slight modifications, is:[1]

$$\begin{array}{ccccc}
\text{Circ. of money (74)} & + & \text{Circ. of checks (1195)} & = & \text{Value of goods bought (1269)} \\
\text{Money} \times \text{its velocity} & + & \text{Deposits} \times \text{their veloc.} & = & \text{Trade} \times \text{scale of prices} \\
M \times V & + & M' \times V' & = & T \times P \\
2.46 \times 30 & + & 12.5 \times 95.6 & = & 641 \times 198 \text{ per cent}
\end{array}$$

The meaning is that the money in actual circulation (*i.e., outside of banks and the United States Treasury*) was 2.46 billions of dollars and changed hands about 30 times in the year, thus effecting 2.46 $\times$ 30 or 74 billions of exchanges; the volume of deposits subject to check was 12.5 billions and changed hands about 95.6 times in the year, thus effecting 12.5 $\times$ 95.6 or 1195 billions of exchanges, the two together making a total of 74 + 1195 or 1269 billions. This paid for a volume of trade of 641 billion units (a "unit" of trade being that amount of goods which, in the base year, 1909, was worth $1), at prices 98 per cent higher than the prices of said base year, so that 641 $\times$ 198 per cent is also 1269.

Some errors in the figures of the diagrams published December 1917 are here corrected.

I would emphasize, even more than I have done previously, that little or no dependence is to be placed on the *absolute* values of V' and T in the equation of exchange. Only the *relative* changes of V' and T may be regarded as having any real value, and that only approximate. Probably they do not have much value, even approximate, for comparing widely distant dates, such as 1918 with 1909. This is because, since 1909, I have been forced to employ *extra*polation, which is almost sure to involve a cumulative error.

We may say almost the opposite of V. Its relative fluctuations are purely conjectural, based chiefly on the behavior of V'; but its abso-

[1] In spite of their very rough character, I have kept up these annual calculations from year to year in the hope that better data would eventually be forthcoming. There are some indications that this hope will be realized next year.

lute value (as calculated for 1896 and 1909) does, I believe, approximate the truth, roughly at least.

Comparing with 1917, we find that the money-in-circulation and deposits-subject-to-check increased about 20 or 25 per cent; the volume of trade increased 7 or 8 per cent; and the price level increased about 15 per cent. The velocities did not change greatly. The behavior of all six magnitudes is shown in the main (upper) diagram.

Thus 1918 was a year of general expansion. The great growth of war trade more than compensated for the great shrinkage of ordinary business; and there was monetary and credit inflation.

The lower diagram is for bimonthly periods and continues that first presented four years ago. It portrays the situation at the six dates[2] of each year for which the Comptroller's figures for national banks are available. The first three dates were before the outbreak of war in Europe.

As noted four years ago, the various magnitudes of the equation of exchange varied little in the first three periods of 1914, preceding the war, but after its outbreak, they fluctuated violently.

There were sudden contractions followed by gradual expansions. The volume of trade showed a sudden reduction following the outbreak of the war and a subsequent full recovery distributed through the remainder of 1914. The velocities[3] of circulation showed the same sudden contraction, with subsequent rapid recovery.

In short, the exchangers of money and goods, following the alarm of war, temporarily "stopped, looked, and listened." Money was held and even hoarded. As a consequence, there was an emergency expansion of the volume of money during the last half of 1914, with a restoration to normal in 1915, and a tendency to expand towards the end of 1916.

The deposits, on the other hand, executed an opposite movement, contracting soon after the war began, and expanding during 1916.

The entrance of the United States into the war, in April, 1917, seemed to cause far less disturbance than the original outbreak in 1914, presumably because it was less of a surprise. Moreover, instead of a slowing down of circulation there was a speeding up and a rise of prices.

[2] The exact dates for the Comptroller's data are given in the table below (for money in banks).

As indicated in the heading of the lower diagram, all the rates are rates per year, not per month. The method of calculation is the same as that used four years ago and described in this Review for June, 1915 (p. 407).

[3] As to money, this is only inferential, on the assumption that its velocity (V) followed that of deposits (V').

Following the armistice in November, 1918, there was another speeding up of circulation. There was also an expansion of deposits and trade.

These various changes in the equation of exchange are closely associated with a third magnitude, namely, the *money in banks,* that is, the (cash) bank reserves which are not represented specifically in the diagram but which are given (in billions) in the following table:

MONEY IN BANKS

Date	National	All	Date	National	All
1914			1916		
Jan. 13	1.03		Mar. 7	.90	
Mar. 4	1.02		May 1	.85	
June 30	1.02	1.67	June 30	.82	1.91
Sept. 12	.98		Sept. 12	.85	
Oct. 31	1.01		Nov. 17	.86	
Dec. 31	.73		Dec. 27	.88	
1915			1917		
Mar. 4	.78		Mar. 5	.89	
May 1	.79		May 1	.84	
June 23	.86	1.77	June 20	.75	2.75
Sept. 2	.91		Sept. 11	.49	
Nov. 10	.92		Nov. 20	.52	
Dec. 31	.88		Dec. 31	.53	
			1918		
			Mar. 4	.45	
			May 10	.46	
			June 29	.38	2.90
			Aug. 31	.36	
			Nov. 1	.44	
			Dec. 31	.52	

It is interesting to note the behavior of bank reserves, following the three critical points of time above discussed.

These figures, with those in the diagram, indicate that the shock of war produced, in the autumn of 1914, a displacement of cash from banks into private pockets and tills, followed by a slow reaction.

After the entrance of the United States into the war there was the same tendency for money to flow out of the banks.[4]

After the armistice there was a back flow.

IRVING FISHER.

Yale University.

[4] The large drop between June 20 and September 11, 1917, was, however, due to the change in reserve requirements, made by the amendment to the Federal Reserve act, June 21, 1917, prescribing that national banks should keep all their legal reserve with the Federal Reserve Banks.

The Information and Education Service of the United States Department of Labor has made a reprint of the address of Professor Irving Fisher before the conference of governors and mayors at the White House, March 3, 1919, on *The New Price Revolution.*

The Price Section of the Division of Planning and Statistics of the War Industries Board has issued a pamphlet on *Comparison of Prices during the Civil War and the Present War* (Washington, 1918, pp. 54).

Public Finance

The Income Tax Primer has been revised as of date March 1, 1919, by the Bureau of Internal Revenue, for the information of taxpayers (Washington, preliminary edition, pp. 38). The bureau has also issued a preliminary edition of *Income Tax Primer for Farmers* (pp. 27).

In the *Eighth Annual Report of the New Hampshire State Tax Commission* (Concord, 1918, pp. 199) the subject of the relation of savings banks to taxation is briefly discussed.

The *Report of the Tax Commissioner of Connecticut for the Biennial Period, 1917-1918* (Hartford, pp. 269), gives some attention to the subject of taxation of inheritances. It also contains excerpts from a number of addresses on the various aspects of tax problems.

The *Seventh Annual Report of the Board of Tax Commissioners of Rhode Island* (Providence, 1919, pp. 53) refers to the inheritance tax act of 1916 and also contains a discussion on the desirability of a uniform date for assessment.

Tax Laws of the State of New Jersey have been recently compiled under the direction of the State Board of Taxes and Assessment of New Jersey (Trenton, 1918, pp. 193). The compilers, Theodore Backes and G. W. Schrothe, Jr., have added abundant notes and annotations.

The *First Biennial Report of the State Tax Commission of Missouri, 1917-1918* (Jefferson City, pp. 259) contains a considerable amount of descriptive material in regard to the tax laws of Missouri. There are reprints of the papers presented at different tax conferences. Pages 160-170 present a general discussion of the inheritance tax and pages 171-190 deal with the income tax. A summary is also given on tax laws in other states with many excerpts from the volume by Dr. Lutz on *The State Tax Commission.*

The Third Biennial Report of the Tax Commission of South Dakota, 1917-1918 (Pierre, pp. 112), also has reference to the working of the new tax commission law of that state as of 1913.

Other tax reports are:

Report of the Tax Commissioner of Massachusetts, 1918 (Boston, 1919, pp. 176).

Annual Report of the State Tax Commission of New York for 1918 (Albany, pp. 95).

Report of the State Tax Commission of North Carolina, 1918 (Raleigh, pp. 425).

The *Report of the State Board of Equalization of Alabama, from September, 1915 to October, 1918* (Montgomery, pp. 182).

The *Report of the Board of State Tax Commissioners and State Board of Assessors of Michigan for 1917-1918* (Lansing, pp. 81).

Sixth Report to the Legislature by the Tax Commission of Kansas, 1918 (Topeka, pp. 66).

Sixth Biennial Report of The Tax Commission of Kansas, 1916-1918 (Topeka, 1918, pp. 66).

Report of Proceedings of the Arizona Tax Conference, July, 1918 (Phoenix, pp. 176).

Fourth Biennial Report of North Dakota Tax Commission (Bismarck, 1919, pp. 77).

Report of the Tax and License Commission to the State Board of Equalization, Montana, 1917-1918 (Helena, pp. 204).

Fifth Biennial Report of the Commissioner of Taxation of Wyoming for 1917-1918 (Cheyenne, pp. 76).

First Biennial Report of the State Tax Commissioner of Washington, 1918 (Olympia, pp. 114).

The National Industrial Conference Board has prepared a *Brief Analysis of War Revenue Bill H. R. 12863 as Affecting Industry* (Boston, Jan. 27, 1919, pp. 15).

The Report of the Committee on Taxation, presented at the forty-second annual meeting of the New York State Bar Association, held in New York, January 17, 1919, has been issued as a reprint (pp. 111).

The *Twenty-eighth Annual Report of the New York Tax Reform Association* (29 Broadway) gives a summary of the changes in tax laws during 1918, and the recent proposals.

Insurance and Pensions

Bulletin No. 243 of the United States Department of Labor Bureau of Labor Statistics presents *Workmen's Compensation Legislation of the United States and Foreign Countries, 1917 and 1918* (Washington, Sept., 1918, pp. 477).

PERIODICALS

The Review is indebted to Robert F. Foerster for abstracts of articles in Italian periodicals, and to R. S. Saby for abstracts of articles in Danish and Swedish periodicals.

Theory

(Abstracts by Arthur N. Young)

Camp, W. R. *Limitations of the Ricardian theory of rent.* II. Pol. Sci. Quart., Dec., 1918. Pp. 29. Technological changes, notably the development of railways, have so altered the economic situation that Ricardo's doctrine that progress would tend to better the relative position of agriculturists compared with capitalists is shown to be incorrect.

Carver, T. N. *The behavioristic man.* Quart. Journ. Econ., Nov., 1918. Pp. 5. The analyses of the "behavioristic school of economists" supplement rather than supplant the explanations of economic motives given by the classical school.

Gurrieri, A. *I coefficienti storico-economici dell' utopia sociale di Platone.* Riv. Ital. di Soc., Jan.-June, 1918. Pp. 33.

Loos, I. *Propaedeutic to modern economics.* Am. Journ. Sociology, July, Sept., 1918. Pp. 36, 14. A series of three essays: Survey of economic nationalism; The larger social science and open questions of economic methodology; The divisions of current economics.

Loria, A. *Nuovi stelloncini critici.* Rif. Soc., Jan.-Feb., 1919. Pp. 19. Reflections upon a variety of problems in theory.

Economic History, United States

(Abstracts by E. L. Bogart)

Bradlee, F. B. C. *The Salem iron factory.* Hist. Coll. Essex Inst., Apr., 1918. Pp. 17. An account of the first iron works in the United States.

Cates, D. *Preliminary survey of industrial reconstruction.* Journ. Pol. Econ., Jan., 1919. Pp. 8. Unemployment can best be avoided by building public works and the use of government employment agencies.

Cotterill, B. S. *National railroad convention in St. Louis, 1849.* Missouri Hist. Rev., July, 1918. Pp. 16.

Emerson, F. V. *The Southern long-leaf pine belt.* Geog. Rev., Feb., 1919. The yellow pine is being rapidly cut and the problem is presented of the proper utilization of the cut-over lands. The three most feasible projects are reforestation, agriculture, and stock raising.

Fish, C. R. *Back to peace in 1865.* Am. Hist. Rev., Apr., 1919. Pp. 8. A brief outline of demobilization after the Civil War, the absorption of ex-soldiers into industry, and the pension development.

Fox, D. R. *The economic status of New York Whigs.* Pol. Sci. Quart., Dec., 1918. Pp. 18. The well-to-do and conservative elements in New York state about 1840 belonged primarily to the Whig Party.

Goodwin, Cardinal. *American occupation of Iowa.* Iowa Journ. Hist. & Pol., Jan., 1919. Pp. 20. A historical review of the state, its boundary-fixing, population growth, industries, etc.

Kellogg, L. P. *The fur trade in Wisconsin.* Wis. Archeologist, Sept., 1918. A history of development.

Lyford, J. O. *New Hampshire's financial history.* Granite Monthly, Mar., 1919. Pp. 5. A brief history of that state's finances from Civil War days.

Rogers, H. O. *The lottery in American history.* Americana, Jan., 1919. Pp. 14. A review of lotteries in foreign countries, their adoption here in 1784, and their course down to 1894.

Steiner, B. C. *South Atlantic states in 1833 as seen by a New Englander.* Maryland Hist. Mag., Dec., 1918. Continuing a diary of Henry Barnard.

Economic History, Foreign

Andréadès, A. *Les progrès économiques de la Grèce depuis quarante ans.* II. Jour. des Econ., Jan. 15, 1919. Pp. 11.

Bourne, H. E. *Food control and price-fixing in revolutionary France.* Journ. Pol. Econ., Feb., Mar., 1919. Pp. 21.

Cabiati, A. *Il collocamento nell' immediato dopo-guerra.* Rif. Soc., Nov., Dec., 1918. Pp. 15. Industrial and social needs of Italy in the first after-war months.

Frank, T. *The economic life of an ancient city.* Classical Philology, June, 1919.

Frank, T. *Agriculture in early Latium.* Am. Econ. Rev., June, 1919. Pp. 10.

Giampietro, P. *La legislazione di guerra sulle miniere e l'unificazione delle leggi minerarie.* Riv. d. Soc. Commerc., Nov., 1918. Pp. 6.

Guyot, Y. *Le règlement des comptes avec l'Allemagne.* Journ. des Econ., Jan. 15, 1919. Pp. 24.

Marion, M. *La question du papier monnaie en 1790. Les premières fautes.* Rev. Hist., 1918.

Michels, R. *Cenni su alcuni aspetti delle condizioni operaie in Germania durante la guerra mondiale.* Rif. Soc., Jan.-Feb., 1919. Pp. 15.

Pico, A. B. *Giuseppe Toniolo.* Riv. Internaz., Nov., 1918. Pp. 23. A memorial essay on the life of the late editor of *Rivista Internazionale,* with a bibliography of his writings.

Pigou, A. C. *Government control in war and peace.* Econ. Journ., Dec., 1918. Pp. 10. Deals with governmental control of production, rationing, and price-fixing of commodities.

Prato, G. *Le fonti storiche della legislazione economica di guerra. Il controllo dei cambi in Piemonto nel 1798.* Rif. Soc., Sept.-Oct., 1918. Pp. 33.

Raffalovich, A. *Le marché financier en 1918.* Journ. des Econ., Jan. 15, 1919. Pp. 24.

RAFFALOVICH, A. *Quelques aspects économiques de l'Allemagne: le châtiment.* L'Europe Nouvelle, Jan. 4, 1919. Pp. 2.

SCHELLE, G. *L'influence de la guerre sur le pouvoir de consommation et sur la formation des capitaux.* Journ. des Econ., Jan. 15, 1919. Pp. 9.

SCHEUER, F. *L'industrie horlogère Suisse depuis la guerre.* Zeitschr. f. Schweiz. Stat. u. Volkswirts., Parts 2 & 3, 1918. Pp. 7.

SUBERCASEAUX, G. *Effets de la guerre sur la vie économique du Chili.* Journ. des Econ., Feb. 15, 1919. Pp. 7.

Agricultural Economics

(Abstracts by A. J. Dadisman)

ARNOLD, J. H. and MONTGOMERY, F. *Influence of a city on farming.* U. S. Dept. Agr. Bull. 678, 1918. Pp. 24. A popular bulletin showing factors influencing profits based on 100 survey records; containing tables, charts, and description of typical farms.

BATTISON, W. J. *The necessity of an increased wool supply.* Bull. Nat. Assoc. Wool Manfrs., Jan., 1919. Pp. 9. An address calling attention to the possibilities and necessity of growing enough wool to supply domestic needs.

BECKERICH, A. *Les warrants agricoles.* Journ. des Econ., October, 1917. Pp. 6. A discussion of the short-time agricultural loan as used in France and its effect on crop production.

DIXON, H. M. and DRAKE, J. A. *A study of farm management problems in Lenawee County, Michigan.* U. S. Dept. Agr. Pp. 36. A popular bulletin showing typical farm practices in the region studied. The basic data for the bulletin were obtained from 453 survey records for the farm year 1911.

GILLETTE, J. M. *Marketing farm products.* Quart. Journ. Univ. No. Dak., Jan., 1919. Pp. 14. The author points out the general phases of the subject, notes defects, and mentions remedial measures.

MAYLANDER, A. *Food situation in Germany during the summer of 1918.* Mo. Labor Rev. Nov., 1918. Pp. 24. Largely extracts from papers and speeches showing general scarcity of food and rising prices with resulting public discontent.

MUNGER, T. T. *First steps for bringing into use the idle lands of Oregon.* Commonwealth Rev., Univ. of Oregon. July, 1918. Pp. 11. An argument favoring the preparation of logged-off land in western Oregon by the government for colonization by returned soldiers.

PRATO, G. *La terra ai contadini o la terra agli impiegati?* Rif. Soc., Jan.-Feb., 1919. Pp. 56. For two years there has been an insistent demand in Italy that the land be given over to the people, and a large literature has resulted. The significance and merits of the movement are here studied.

THOMPSON, W. H. *The profits and rent of agricultural land in a corner of Bengal in 1789.* Bengal Econ. Journ., Sept., 1918. Pp. 21. An analysis of methods, cost of cultivating crops, cost of living, profits, etc., with some comparisons for 1913.

WILCOX, E. V. *Lease contracts used in renting farms on shares.* U. S. Dept. Agr. Bull. 650, 1918. Pp. 36. A study of the distribution of investments, expenses, and incomes between landlord and tenant farm lessee contracts throughout the United States.

WILLIARD, R. E. *A farm management study of cotton farms of Ellis County, Texas.* U. S. Dept. Agr. Bull. 659, 1918. Pp. 54. A study of organization of cotton farms and cost producing crops. Data from 120 farms; tables, charts, and illustrations.

WILSON, R. R. *The common interests of the cotton grower and cotton manufacturer in the United States.* Econ. World, Mar. 15, 1919. Pp. 5. A discussion of the needs of the whole cotton industry—growing, storage, and manufacturing.

Agricultural coöperation in Denmark. Ill. Dept. Agr. Circ. 259. 1918. Pp. 7. A brief statement of conditions conducive to agricultural coöperation in Denmark and growth and success of some coöperative organizations.

Food and fuel control in France. Mo. Labor Rev., Nov., 1918. Pp. 8. A statement of control measures and fixed prices of cereals, vegetables, meats, etc.; coal and gasoline; and restaurant regulations.

L'agriculture française et les prisonniers in guerre. Rev. d'Econ. Pol., July-Aug., 1918. Pp. 17. Contrast between French methods and German methods of handling prisoners of war in agricultural work.

Agricultural wages and the increase in the cost of living. Intern. Rev. Agr. Econ., Oct., 1918. Pp. 10. An examination of the movement of agricultural wages and cost of living in Argentine Republic, 1913 to 1915.

Railways and Transportation

(Abstracts by Julius H. Parmelee)

ARKWRIGHT, B. H. *The average man and the railroads.* Metropolitan, Apr., 1919. Pp. 3.

D'AVENEL, G. *Le transport des marchandises depuis sept siècles.* Rev. des Deux Mondes, Sept. 1, 1918. Pp. 28. Historical development of freight traffic by rail and water.

BRADFORD, E. A. *Commodity regulation in light of rail and utilities cases.* Annalist, Jan. 20, 1919. P. 1. Government control exerts downward pressure on capital values.

CARTER, W. S. *Effect of Federal control on railway labor.* Proc. Acad. Pol. Sci., Feb., 1919. Pp. 13. Work of the division of labor, U. S. R. R. Administration.

COLE, A. B. *What freight handling on electric roads requires and costs.* Elec. Ry. Journ., Feb. 1, 1919. Pp. 10. With illustrations and statistical tables.

COOPER, C. S. *The railways of the republic of Chile.* Ry. Rev., Mar. 1, 8, 1919. Pp. 5, 5. With map and illustrations.

CUNNINGHAM, W. J. *The arithmetic of railroading.* N. Y. Railroad Club. Proc., Feb. 21, 1919. Pp. 16. Work of Operating Statistics Section, U. S. R. R. Administration.

DEWING, A. S. *The purposes achieved by railroad reorganization.* Am. Econ. Rev., June, 1919. Pp. 30.

DUNN, S. O. *What has happened to the railways.* Collier's, Feb. 15, 1919. Pp. 4.

ERNST, F. B. *Railroad purchases as a stabilizer of business.* Ry. Age, Apr. 11, 1919. Pp. 3. With diagrams.

FINN, L. B. *Why private ownership cannot meet demands.* Traffic Wld., Apr. 5, 1919. Pp. 8.

FITZGIBBON, J. M. *Should railroads handle the express business?* Ry. Rev., Feb. 22, 1919. Pp. 3. Answers in the affirmative.

FORD, E. *Can British railways be made self-supporting?* Ry. Gaz. (London), Feb. 21, 1919. Pp. 2.

GOLDMARK, P. *Women in the railroad service.* Proc. Acad. Pol. Sci., Feb., 1919. Pp. 6.

HOLMES, W. H. *Improved railway conditions in Nicaragua.* Ry. Rev., Feb. 8, 1919. Pp. 5. With map and illustrations.

HOUARD, G. *Le rail Africain.* Je Sais Tout, Feb. 15, 1919. Pp. 11.

KAHN, O. H. *Concerning today's railroad problem.* Ry. Rev., Mar. 1, 1919. Pp. 2.

LACROIX. *Les chemins de fer pendant la guerre.* I. *L'effort militaire.* Rev. des Deux Mondes, Mar. 15, 1919. Pp. 15.

LANE, F. K. *The progress of the Alaskan railroad.* Ry. Age, Mar. 7, 1919. Pp. 5. Memorandum submitted to Congress by Secretary Lane. Road about two thirds completed, at cost approximating $73,000 per mile of main line.

LAVIS, F. *An important development in the railways of Spain.* Ry. Age, Mar. 28, Apr. 4, 11, 1919. Pp. 6, 3, 5. With map and illustrations. Proposed trunk line from France to Gibraltar.

LEIGH, E. B. *Railway buying and industrial readjustment.* Ry. Age, Apr. 4, 1919. Pp. 3.

LISMAN, F. J. *A possible solution of the railroad problem.* Ry. Age, Mar. 28, Apr. 4, 1919. Pp. 4, 7. Advocates system consolidation, strict regulation, and a fair return to investors. Eight maps show possible combinations of systems.

MACKAY, C. H. *Government ownership of the telegraph lines and the national economy.* Econ. Wld., Jan. 18, 1919. Pp. 3. Opposes nationalization on grounds of economy and efficiency.

MORAWETZ, V. *The railway problem.* N. Am. Rev., Mar., Apr., 1919. Pp. 15, 14. Proposed solution of the problem.

RANDOLPH, O. C. F. *Building American railroads in France.* Ry. Maint. Engr., Apr., 1919. Pp. 3.

REID, W. A. *Bolivia's railways—progress and prospects.* Ry. Rev., Mar. 15, 1919. Pp. 6. With map and illustrations.

RUGGLES, C. O. *Railway service and regulation.* Quart. Journ. Econ., Nov., 1918. Pp. 45. Reviews the inadequacy of railroad facilities of past eight years in relation to growth of transportation demands, and takes up present railroad situation.

SINES, G. H. *Adjustments of wages and conditions of employment under governmental control of industry.* Proc. Acad. Pol. Sci., Feb., 1919. Pp. 6. Ironing out inequalities in railway wages.

SISSON, F. H. *The electric railway situation from the standpoint of investors.* Econ. Wld., Mar. 29, 1919. Pp. 4.

WARBURG, P. M. *A suggestion of the main principles on which the solution of the railroad problem should be sought.* Supp. Mo. Bull. Chamber Comm. N. Y., Feb., 1919. Pp. 36. Advocates private ownership, guarantee of 4½ per cent on valuation of property, profits above 6 per cent on capital to be shared with government.

WILCOX, D. F. *Problem of reconstruction with respect to urban transportation.* Nat. Munic. Rev., Jan., 1919. Pp. 16. Advocates public operation, with or without ownership, as solution of serious present problem.

WILSON, H. L. *Dinner is now served.* Sat. Eve. Post, Apr. 12, 1919. Pp. 4. Jocular criticism of Railroad Administration table d'hote dining-car meals.

"Berlin-Baghdad." Ry. Gaz. (London), Mar. 7, 1919. Pp. 3. With maps.

Developments in American Railroad Association. Ry. Age, Mar. 7, 1919. Pp. 2. Reorganization of American Railway Association to include a number of existing mechanical and other railway associations.

European train speeds. Ry. Gaz. (London), Jan. 17, 24, Feb. 14, Mar. 7, 14, Apr. 4, 1919. Pp. 6, 8, 5, 6, 5, 3, 3. Series unfinished.

Experience of French argument against guaranteed incomes. Ry. Age, Apr. 4, 1919. Pp. 2.

Federal railway failure one of service as well as dollars. Annalist, Apr. 14, 1919. Pp. 2. Analysis of charts prepared by F. L. Hutchins.

Government ownership from a British point of view. Ry. Age, Jan. 24, 1919. Pp. 2. Reprint of article from *Engineering* (London).

Labor saving devices in railroad offices. Ry. Rev., Feb. 8, 15, 1919. Pp. 4, 4.

Ministry of ways and communications. Ry. Gaz., Mar. 7, 1919. Pp. 4. Proposed British transport bill.

Modern armies and modern transport. Ry. Gaz., (London), Jan. 24, 31, Feb. 21, 28, Mar. 14, Apr. 14, 1919. Pp. 2, 1, 4, 2, 2, 1. Series outlining the work of the several British railways in the war.

Peru's railways need many connecting links. Ry. Age, Mar. 7, 1919. Pp. 5. With map and illustrations.

The railways of the republic of Brazil. Econ. Wld., Mar. 22, 1919. Pp. 5. Digest of report of Bureau of Foreign and Domestic Commerce.

The select committee on transport. Ry. Gaz. (London), Jan. 31, Feb. 7, 14, 21, 28, Mar. 7, 1919. Pp. 3, 3, 3, 3, 2, 3. Digest of hearings.

State ownership and operation of railways. Ry. Gaz. (London), Jan. 17, 1919. Pp. 3. Concluding section of digest of evidence before South African inquiry into state ownership.

What the railwaymen want. Nation (London), Feb. 8, 1919. Pp. 2.

Commerce

(Abstracts by H. R. Tosdal)

Barber, C. A. *Indian sugar-cane industry.* Wealth of India, Oct., 1918. Pp. 3. The difficulties are chiefly the class of cane grown, competition with *gur* and with other crops and the parcellization of the land.

Battison, W. J. *Annual wool review for 1918.* Bull. Nat. Assoc. Wool Mfrs., Jan., 1919. Pp. 67. Excellent, comprehensive statistical review of wool for 1918.

Cadoux, G. *De la meilleure utilisation des combustibles en France et en Angleterre. Son importance économique et sociale.* Journ. de la Soc. Stat. de Paris, July, 1918. Pp. 14. In urging more efficient utilization of fuel, cites with approval a report of a British subcommittee recommending use of coal through conversion into electric power by a system of large central plants under government control.

Cance, A. E. and Ferguson, R. H. *The cost of distributing milk in six cities and towns of Massachusetts.* Thirtienth Annual Rept. Mass. Agr. Ex. Sta., Jan., 1918. Pp. 54. Presents results of investigation of costs of milk distribution made by agricultural experts. Average arrived at is 2.64 cents per quart.

Cherington, P. T. *After-war problems. Forecast of conditions that will confront the wool manufacturer.* Bull. Nat. Assoc. Wool. Mfrs., Jan., 1919. Pp. 10. Brief survey of wool market conditions during war with suggested program for return to peace basis.

Clark, J. A. H. *The Chilean nitrate industry.* Econ. Wld., Jan. 25, 1919. Pp. 4. Interesting description of technical and business methods in Chilean nitrate industry.

Daniels, G. W. *The cotton trade at the close of the Napoleonic War.* Trans. Manchester Stat. Soc., 1917-1918. Pp. 30. Interesting historical description of cotton trade based upon examination of statistical and other sources.

Di Nola, C. *Gli odierni aspetti dell' economia dei transporti.* Giorn. d. Econ., Dec., 1918. Pp. 16. The first instalment of a systematic review of shipbuilding and shipping today.

Litman, S. *Effects of the war on foreign trade.* Hist. Outlook, Feb., 1919. Pp. 2. Brief but thoughtful article asserting that the foreign trade of the United States and Germany will be most profoundly affected as a result of the war.

Marsh, A. R. *The cotton trade in the United States in 1918.* Econ. Wld., Feb. 8, 1919. Pp. 3. Brief survey of experience of American cotton trade in 1918.

MARTIN, P. F. *Effects of the war on British trade.* World's Markets, Feb., 1919. Pp. 3. Imports in 1918 showed huge gain over 1914, while exports declined; shipping eager to be relieved of government control.

PROBUS ET DE LAVERGNE. *L'exportation et les conditions de son développement.* L'Europe Nouvelle, Dec. 28, 1918, Jan. 4, 1919. Pp. 3, 3. Urges formation of export combinations to finance French exporters.

SATO, S. *The rice industry of Japan.* Econ. Journ., Dec., 1918. Pp. 13. Statistical study emphasizing paramount importance of the rice industry to Japan, the small size of fields, and small incomes of farmers. Advocates introduction of livestock to improve conditions.

SNOW, C. D. *Our statistics of foreign commerce and the war.* Quart. Pub. Am. Stat. Assoc., Dec., 1918. Pp. 14. Describes nature and utilization of foreign commerce statistics during war.

TAUSSIG, F. W. *Price-fixing as seen by a price-fixer.* Quart. Journ. Econ., Feb., 1919. Pp. 36. Excellent economic analysis of government price fixing in various lines. It is asserted that government price fixing was not uniform in its base, little guided by principles of deliberate policies, but so far as it went the outcome seemed to be good.

WYLER, J. *Fremdenverkehr und bevölkerungsbewegung.* Zeitschr. f. Schweiz. Stat. & Volkswirtsch., Heft 4, 1918. Pp. 18. A study of the Berne and Interlaken district in Switzerland showing statistically the development of tourist traffic and the movement of population.

ZINGALI, G. *Soste portuarie e giacenze di merci.* Riv. d. Soc. Comerc., Nov., 1918. Pp. 25. An analysis, largely statistical, of the operations of the port of Genoa.

Business conditions in Porto Rico Sound. World's Markets, Jan., 1919. Pp. 6. Survey of general commercial conditions. Financial situation greatly improved as result of the war.

An English survey of petroleum in the world's economy in 1918. Econ. Wld., Mar. 1, 1919. Pp. 3. Outlines the struggle of petroleum producers during the past year to supply the vital needs of the Allies in the War.

Scheme for unification of the port accepted. Greater New York, Jan. 27, 1919. Pp. 2. Plan proposed for the creation of a single authority representing the states of New York and New Jersey to manage the port of New York as a whole receives approval.

United States Tariff Commission for free ports. Greater New York, Jan. 6, 13, 1919. Pp. 3, 3. Asserts that the commission has officially recommended the adoption of the plan first proposed in this country by the Merchants' Association as an indispensable adjunct of our rapidly growing foreign trade. Claims that drawbacks are granted only under such exacting and intricate regulations that the amount of the drawback very often does not pay the cost of collecting it.

Accounting

(Abstracts by Martin J. Shugrue)

Belser, F. C. *Rapid calculation of compound interest processes.* Journ. Account., Apr., 1919. Pp. 8. Short-cut methods of calculating approximately compound interest, sinking fund instalments, annuities, present values, discounts, and other interest processes. Illustrated with problems and solutions.

Burton, A. S. *Why some cost systems fail to produce desired results.* Journ. Account., Apr., 1919. Pp. 10. Principal reasons are lack of understanding and red tape. Describes experiences with firms doing special or specification work, such as structural steel, concrete construction and fixtures where jobs are taken according to plans and specifications.

Field, W. P. *Accounting control for company store or commissary.* Journ. Account., Feb., 1919. Pp. 11. A practical method of accounting control for the retail store is here presented. The author states that the system as outlined has survived the test of many years.

Harrison, G. C. *Cost accounting to aid production.* V, VI, VII, Indus., Manag., Feb., Mar., Apr., 1919. Pp. 9, 6, 5. (5) The importance of coördination between the cost and planning systems. (6) Two large diagrams are presented showing how the cost, planning, and production systems may be coördinated. (7) Extension of application of scientific management principles illustrated by example of a firm entering field of manufacturing automobile trucks.

Kurtz, W. *Depreciation in telephone utilities.* Journ. Account., Feb., 1919. Pp. 14. In no class of public utilities is there a more fertile field for speculation as to what depreciation includes and the annual amount to be charged against operating expenses.

Lyon, O. *Municipal accounts.* Journ. Account., Feb., 1919. Pp. 9. Accurate statistical reports of a municipality should be prepared periodically in comparative form and accompanied by charts. Discusses specific accounts, schedules, and statements.

McKay, C. W. *Three industrial appraisals in one.* Indus. Manag., Feb., 1919. Pp. 3. An engineering appraisal today should be prepared from three points of view; for excess profit tax computation, for plant accounting, and for insurance adjustment.

Nelson, G. *Depreciation and depletion in relation to income tax returns.* Journ. Account., Feb., 1919. Pp. 8. Particular reference to depletion in cases of oil or gas properties, mines, and timber lands.

Stover, J. *Uniformity in school accounting.* Nat. Educ. Assoc. Journ., Nov., 1918. Pp. 5.

Thulin, F. *Mathematics of credit extension.* Journ. Account., Apr., 1919. Pp. 9. Factors to be taken into consideration in passing judgment on the soundness of the promise to pay. Form outlined by Federal Reserve Board in April, 1917, number of the *Federal Reserve Bulletin* cannot very well be improved upon.

Investments and Securities

(Abstracts by A. S. Dewing)

BENSON, R. *Probable diversion of British investment capital from the United States to other fields.* Econ. Wld., Apr. 12, 1919. America being a creditor of the British Empire will not afford a profitable field for investment of British capital. Interesting comment that the English investment company, of which author is head, has consistently lost on British and colonial investments, and more than counterbalanced the losses from American investments.

KENT, F. I. *Matters to be studied by the investor in foreign countries.* Econ. Wld., Mar. 15, 1919. Closely summarized article giving factors to be considered under appropriate headings.

RIFE, R. S. *Investment relations between Canada and the United States.* Guaranty News, Mar., 1919. Author's familiarity with statistics and use of them makes the article far superior to that ordinarily found in periodicals of this type.

SISSON, F. H. *The electric railway situation from the standpoint of investors.* Econ. Wld., Mar. 29, 1919. Address at meeting of American Electric Railway Association. Emphasizes the deplorable condition of electric railway credit and enumerates the causes. Unfortunately offers no solution.

PAYEN, E. *Les cours des principales valeurs fin 1913, 1914, 1917 et 1918.* L'Economiste, Jan. 11, 18, 1919. A summary of prices of bonds, French, Belgian, and neutral, in December of each of above years. Interesting to note the little decline, and how nearly 1918 prices approximate those of 1913.

Labor and Labor Organizations

(Abstracts by George E. Barnett)

ANDREWS, J. B. *International labor protection.* Am. Lab. Legis. Rev., Mar., 1919. Pp. 12. Favors American participation in labor treaties.

BEARD, C. A. *Public employment.* Nat. Munic. Rev., Jan., 1919. Pp. 7. Recommends changes in methods of recruiting and in political status of government employees.

CARTER, W. S. *Effect of federal control on railway labor.* Ry. Age, Dec. 13, 1918. Pp. 48. Outline of efforts to create improved relations between employer and employee.

CARVER, T. N. *Four labor programs.* Quart. Journ. Econ., Feb., 1919. Pp. 23. Finds the explanation of the differences in labor programs in different degrees of lack of balance among the factors of production.

COLE, G. D. H. *The industrial councils of Great Britain.* Dial, Feb. 22, 1919. Pp. 3. The Whitley councils will have little influence on the impending conflict.

DOUGLAS, P. H. and WOLFE, F. E. *Labor administration in the shipbuilding industry during war time.* I. Journ. Pol. Econ., Mar., 1919. Pp. 43. Careful and detailed description of the organization for dealing with labor problems.

FISH, E. H. *Principles of employing labor.* Indus. Manag., Feb., 1919. Pp. 5.

GLEASON, A. *Towards democracy in reconstruction.* Intercol. Social., Feb., Mar., 1919. Pp. 5. Discusses tendencies in English labor opinion.

GOOD, E. T. *What's wrong with labour?* Finan. Rev. Rev., Mar., 1919. Pp. 20. Ignorance of economics is chiefly responsible for labor troubles.

HOOKSTADT, C. *Problem of the crippled man in industry.* Mo. Lab. Rev., Dec., 1918. Pp. 13.

JANES, G. M. *Tendencies in trade union development.* Quart. Journ. Univ. N. Dak., Jan., 1919. Pp. 12. Traces the evolution of fraternal organizations in certain trades into trade unions.

KENDALL, H. P. *New basis for industrial relations.* Am. Contractor, Dec. 28, 1919. Pp. 17. Discusses establishment of federal industrial courts as in Australia.

KERBY, C. E. *Wage earning school children in Detroit and Grand Rapids.* Child Lab. Bull., Aug., 1918. Pp. 8.

LESCOHIER, D. D. *The supply of labor after the war.* Am. Lab. Legis. Rev., Mar., 1919. Pp. 10. Opposes any relaxation of the immigration laws.

PARKINSON, T. I. *Constitutionality of treaty provisions affecting labor.* Am. Lab. Legis. Rev., Mar., 1919. Pp. 14.

POWELL, T. R. *Collective bargaining.* Pol. Sci. Quart., Sept., 1918. Pp. 29. A review of three decisions of the Supreme Court in labor cases, curtailing the right of unions to force themselves on employers—showing the trend of judicial decision.

ROBINSON, A. *Substituted labour of women, 1914-1917.* Trans. Manchester Stat. Soc., 1917-18. Pp. 21.

SINHA, J. C. *Indian guilds.* Bengal Econ. Journ., Sept., 1918. Pp. 15. The history, present state and influence of the guilds.

TEAD, O. *The United States employment service and the prevention of unemployment.* Am. Lab. Legis. Rev., Mar., 1919. Pp. 14. Stresses the importance of an organization which will regularize employment.

TIPPER, H. *Real labor representation.* Automotive Indus., Dec. 12, 1918. Pp. 4. Analysis of Midvale Steel & Ordnance Company's plan.

WEHLE, L. B. *War labor policies and their outcome in peace.* Quart. Journ. Econ., Feb., 1919. Pp. 22. Carries the history of war labor in an earlier number, to the end of the war.

American Federation of Labor reconstruction program. Am. Fed., Feb., 1919. Pp. 14.

Awards and findings of the National War Labor Board. Mo. Lab. Rev., Nov., 1918. Pp. 8.

Federal policy in the employment of women. Mo. Lab. Rev., Nov., 1918. Pp. 9.

How labor representation operates. Iron Trade Rev., Dec. 12, 1918. Pp. 2. Presents plan adopted by Youngstown Sheet and Tube Company.

Minimum wage decrees in California, Oregon, and Washington. Mo. Lab. Rev., Nov., 1918. Pp. 8.

New wage adjustment in the shipbuilding industry. Mo. Lab. Rev., Dec., 1918. Pp. 15. Texts of the awards of October 24, 1918.

Postwar labor program of the International Association for Labor Legislation. Mo. Lab. Rev., Nov., 1918. Pp. 7.

The placing and the immigration of agricultural labour. Intern. Rev. Agri., Aug., 1918. Pp. 12. The organization and working of the French bureaus.

The policy of the labour party. New Statesman, Nov. 23, 1918. Pp. 2. Contends that the labour party alone has a policy on the crucial issues.

Trades-union congress, Great Britain. Mo. Lab. Rev., Nov., 1918. Pp. 6. Resumé of the proceedings.

Woman's place in scientific industry. Cassier's Eng. Monthly, Nov., 1918. Pp. 2. Woman's labor after demobilization.

Money, Prices, Credit, and Banking

(Abstracts by Chester A. Phillips)

Alessio, G. *Moneta e prezzi nelle piu' recenti loro manifestazzioni.* Rif. Soc., Nov.-Dec., 1918. Pp. 9.

Avery, W. G. *Acceptances in retail business.* Journ. Account., Feb., 1919. Pp. 5. Shows that acceptances are feasible instruments of credit in practically all lines of commercial business.

Bhimpure, B. L. V. *A state central bank for India.* Wealth of India, Jan., 1919. Pp. 4. A consideration of the arguments for and against the establishment of a central bank in India leads to the conclusion that such an institution operating along European lines would be of inestimable value.

Bolgert, J. *Le chèque postal français.* Rev. d'Econ. Polit., Sept.-Dec., 1918. Pp. 16. A comparison of the French system with the systems of Austria-Hungary, Germany, Switzerland, Belgium.

Bradford, E. A. *Preserving the gold standard by renouncing gold as money.* Annalist, Feb. 17, 1919. Pp. 2. Proposes an international pool of securities for the cabled settlement of trade balances.

Breton, A. *Financial supremacy.* Bank. Law. Journ., Mar., 1919. Pp. 4.

Calvert, N. *The abuse of rural credit and the Punjab remedy.* Bengal Econ. Journ., Sept., 1918. Pp. 13. Historical account of rural credit extravagances and abuses in the Punjab. The Alienation of Land act of 1901 has afforded protection to borrowers.

Cassel, G. *Abnormal deviations in international exchanges.* Econ. Journ., Dec., 1918. Pp. 3. Hindrances put on Sweden's imports and to a less extent on her exports have resulted in an unprecedented accumulation of assets in foreign countries together with a great importation of Swedish securities from abroad. This has involved an exportation of capital beyond the economic power of Sweden.

Dewavrin, M. *Les variations de changes scandinaves depuis le début de la guerre.* Journ. Soc. Stat. de Paris, Oct., 1918. Pp. 7.

Escher, H. *Die Rechnungsabschlüsse von acht grössern schweizerischen Handelsbanken für das Jahr 1917.* Zeitschr. f. Schweiz. Stat. u. Volkswirts., Part 2 & 3, 1918. Pp. 14. A record of expansion and prosperity.

Estey, H. C. *Select bibliography on cost of living in the United States.* Special Libraries, Nov., 1918. Pp. 6.

Evesque, M. *La guerre actuelle et le marche monetaire.* Journ. Soc. Stat. de Paris, June, 1918. Pp. 5.

Firth, A. S. *The increased cost of clothing materials since 1914.* Econ. Journ., Dec., 1918.

Fisher, I. *Rejoinder to Dr. Knibbs' criticisms.* Am. Econ. Rev., June, 1918. Pp. 7.

Fletcher, H. *The war and the price level.* Bank. Mag., Mar., 1919. Pp. 4.

Jannaccone, P. *Relazioni fra commercio internazionale, cambi esteri e circolazione monetaria in Italia nel quartennio 1871-1913.* Rif. Soc., Nov., Dec., 1918. Pp. 78.

Knibbs, G. H. *Consideration of the proposal to stabilize the unit of money.* Am. Econ. Rev., June, 1919. Pp. 12.

Lavergne, B. *La banque d'Algerie. Son activité générale et le renouvellement de son privilège.* Rev. d'Econ. Polit., Sept.-Dec., 1918. Pp. 50. Detailed historical account of the bank's functions and services.

Law, W. T. *Essentials in developing a broad discount market for acceptances.* Trust Companies, Mar., 1919. Pp. 2. Discussion of the handicaps that must be overcome.

Lawrence, F. W. P. *Deflation and prices after the war.* Econ. Journ., Dec., 1918. Pp. 11. Urges a return to the gold standard and the elimination of fluctuations in the general price level through the adoption of the "compensated" money unit.

Penny, D. H., Jr. *The American dollar finding its place in world exchange.* Annalist, Apr. 7, 1919. Pp. 2. The growth of dollar exchange and the factors affecting it.

Polier, L. *Le crédit à l'exportation et le rôle des banques d'outre-mer.* L'Europe Nouvelle, Jan. 11, 1919. Pp. 3. A plea for adequate foreign exchange facilities for French commerce. Laudation of the foreign banking facilities of England and Germany.

Polier, L. *Le problème de la vie chère.* L'Europe Nouvelle, Feb. 15, 1919.

Thulin, F. *Mathematics of credit extension.* Journ. Account., Apr., 1919. Pp. 9. Rules governing the extension of bank credit.

Tinnes, D. J. *An American standard of value: the market gage dollar.* Am. Econ. Rev., June, 1919. Pp. 4.

Wicksell, K. *Gold after the war in relation to inflation and the foreign exchanges.* Econ. Journ., Dec., 1918. Pp. 4. A criticism of the theory that

the movements of the exchanges are determined in the main by "the quotient between the inflation of the different countries."

WILLIS, H. P. *The federal reserve system in the war year 1918.* Econ. Wld., Feb. 15, 1919. Pp. 3. The method of financing government loans, the growth of the system and its operations, the policy of rationing credit, the conservation of gold, administrative changes, earnings.

WITHERS, H. *Dépôts en banque et "currency notes" en Angleterre.* Rev. d'Econ. Polit., Sept.-Dec., 1918. Pp. 4. The advance of the banks to the government have increased the volume of bank deposits to such an extent that a larger reserve has been rendered necessary. The additional reserve has been furnished by the emission of currency notes.

WYSE, R. C. *The future of London as the world's money market.* Econ. Journ., Dec., 1918. Pp. 11. A plea for a generous attitude toward the active presence in London of banks of all nationalities.

Les avances faites à l'état par la banque de l'Algerie pendant la guerre. Rev. Sci. Légis. Finan., Oct., Nov., Dec., 1918. Pp. 8.

The committee on financial facilities. Journ. Inst. Bankers, Feb., 1919. Pp. 11. Summary of report.

Les finances de la Ville de Paris. Perspectives sur les budgets futurs. L'Econ. Franc., Feb. 8, 1919. Pp. 2.

Financial facilities after the war. Bank. Mag. (London), Feb., 1919. Pp. 10. The conclusions and recommendations of the Vassar-Smith committee on financial facilities after the war.

Gold production committee. Journ. Inst. Bank., Feb., 1919. Pp. 4. The decline in the gold production of the British empire, 1917 and 1918, was due to a shortage of explosives and to increased costs of production. A subsidy would be unscientific and unjustifiable.

Some objections to fixing prices by regulating credit. Annalist, Mar. 3, 1919. Pp. 2.

Les opérations de la Banque de France pendant l'année 1918. L'Econ. Franc., Mar. 1, 1919. Pp. 4. An instalment of the annual report to the shareholders.

The part of the banks in the development of British industry and trade after the war. Econ. Wld., Feb. 15, 1919. Pp. 3. The British Trade Corporation not yet an integral part of the financial machinery of England should be supplemented and assisted by the joint stock banks.

The progress of banking in Great Britain and Ireland during 1918. I. Bank. Mag. (London), Feb., 1919. Pp. 11. Growth of capital and reserves.

Public Finance

(Abstracts by Charles P. Huse)

ANGRISANI, G. *Una possible soluzione del problema doganale: i buoni d'importazione.* Giorn. d. Econ., Nov., 1918. Pp. 10.

BREADNER, R. W. *The Canadian business profits and income war tax acts.* I, II. Bull. Nat. Tax Assoc., Jan., Feb., 1919. Pp. 5, 4. Deals with the administrative provisions of the business profits tax.

Brown, A. O. *The taxation of incomes under the New Hampshire constitution.* Bull. Nat. Tax Assoc., Feb., 1919. Pp. 6. A critical account of the recent movement for tax reform in this state.

Burnham, W. W. *The four mills tax in Providence, R. I.* Bull. Nat. Tax Assoc., Mar., 1919. Pp. 2. Has proved more productive than the old system in both good feeling and revenue.

Chase, O. H. *Motor vehicle taxation.* Bull. Nat. Tax Assoc., Mar., 1919. Pp. 4. In most states taxed as personal property; proceeds generally applied to roads.

Clark, A. B. *Dominion and provincial revenues.* Bull. Nat. Tax Assoc., Jan., 1919. Pp. 3. The Dominion should not seek to deprive Canadian provinces of the right to levy income taxes.

Fairchild, R. F. *The public finance of Santo Domingo.* Pol. Sci. Quart., Dec., 1918. Pp. 21. An excellent survey of economic, political, and financial conditions. Poverty, primitive economic methods, and chaos in land titles hamper the American military government in its attempts at tax reform.

Frey, M. F. *Possible unfortunate effects of the war revenue bill in respect of assumed, but unrealized profits.* Econ. Wld., Jan. 25, 1919. Pp. 2. Discusses possible difficulties in allowing for materials or construction purchased at wartime prices.

Gini, C. *Sul presumibile ammontare dei danni di guerra.* Giorn. d. Econ., Jan., 1919. Pp. 54. The Italian claim to a war indemnity.

Grizziotti, B. *L'imposte sulla ricchezza dopo lo guerra.* Giorn. d. Econ., Feb., 1919. Pp. 48. Not only must far-reaching changes take place in the Italian tax system, to meet the charges left by the war, but a new system of tariffs must be devised.

Hoare, A. *Prospects of national taxation.* Journ. Inst. Bank., Mar., 1919. Pp. 8. England must meet her heavy normal expenditures mainly by heavy direct taxes.

Holcomb, A. E. *Observations on the taxation of public service corporations by a progressive rate on gross receipts.* Bull. Nat. Tax Assoc., Feb., 1919. Pp. 4. Presents arguments against the use of progression in such taxes.

Holzach, C. *Die Steuerverteilung und Steuerbelastung in der Schweiz vor Ausbruch des Weltkrieges.* Zeitsch. f. Schweiz. stat. u. Volkswirts., Parts 2 & 3, 1918. Pp. 52. A statistical study of Swiss taxation since 1874 with the object of finding out the principles which should be followed in dividing the tax authority between federation, canton and commune.

Howe, S. T. *Some problems in connection with full valuation.* Part I. Bull. Nat. Tax Assoc., Mar., 1919. Pp. 4. Urges that assessors be appointed, not elected.

Jeze, G. *Examen de quelques théories nouvelles sur les emprunts de guerre.* Rev. Sci. Légis. Finan., Oct., Nov., Dec., 1918. Pp. 64. A critical examination of the policies of different governments with regard to the rôle of taxation, the rate of interest, the forced loan and the emission of a loan below par.

J., G. *Les finances de guerre de l'Angleterre.* Rev. Sci. Légis. Finan., Oct., Nov., Dec., 1918. Pp. 34. Brings the study down to the beginning of the armistice.

Levy, R. G. *Finances de paix.* Rev. des Deux Mondes, Jan. 15, 1919.

Maxwell, A. J. *Taxation of incomes in North Carolina.* Bull. Nat. Tax Assoc., Mar., 1919. Pp. 5. Advocates a change in the state constitution to permit taxation of unearned income.

Meech, H. W. *Municipal assessments and taxation in Alberta.* West. Munic. News, Dec., 1918. Pp. 3.

Neymarck, A. *Les milliards de la guerre.* Journ. Soc. Stat. de Paris, Apr., 1918. Pp. 27. Describes the sources of French revenues in 1870 and in the present war. Confident in the financial future of the French people.

Pigou, A. C. *The burden of war and future generations.* Quart. Journ. Econ., Feb., 1919. Pp. 14. Future generations will suffer less from lack of capital and the repressive effects of taxes, if war expenditures are met by tax levies rather than by loans.

Raiga, M. *Les finances et le régime fiscal de guerre de l'Angleterre.* Journ. Soc. Stat. de Paris, Jan., 1919. Pp. 16. In this great crisis England has remained true to her excellent fiscal ideals.

Raffalovich, A. *Finances bolcheviques en 1918.* Journ. des Econ., Feb. 15, 1918. Pp. 4. Characterized by tremendous deficits, large military appropriations, lack of financial control, and enormous issues of paper money.

Raffalovich, A. *Quelques aspects économiques de l'Allemagne et de l'Autriche.* L'Econ. Franç., Mar. 8, 1919. Pp. 3. Austrian finances have been brought to desperate straits by tremendous issues of paper money, great war debts, and the dissolution of the old empire.

Suret, L. *La situation financière et les declarations de M. Klotz.* L'Europe Nouvelle, Mar. 1, 1919. Pp. 4. A critical examination of the French financial situation does not clearly show the grounds for the optimism expressed by M. Klotz.

Yves-Guyot. *Les finances de guerre des Etats-Unis.* Journ. Soc. Stat. de Paris, Aug., Sept., 1918. Pp. 19. Deals with taxation and loans during the first year of the war.

Zoller, J. F. *Taxable net income under the New York law.* Bull. Nat. Tax Assoc., Jan., 1919. Pp. 4. A construction of the term "taxable net income" so used in the New York corporation tax law.

The assessment question and "public opinion" in Toronto. Bureau Munic. Research, Bull. No. 70, Nov., 1918. Pp. 19.

Exemption of Liberty bonds from state taxation of banks. Journ. Am. Bank Assoc., Jan., 1919. Pp. 4. Discusses recent decisions.

Federal taxation for regulation and social adjustment. Columbia Law Rev., May, 1918. Pp. 6. A survey of the aim of different tax impositions, social, punitive, or revenue producing, as viewed by judicial interpretation.

Increasing municipal revenue. Munic. Journ., Feb. 15, 1919. Pp. 3. Why

higher per capita revenues are necessary, methods employed by the larger cities of the country for increasing revenue—delinquent taxes—exemptions—license taxes on various kinds of business.

Les méthodes financières de guerre de l'Angleterre, des Etats-Unis et de l'Empire Allema" . Rev. Sci. Légis. Finan., Oct., Nov., Dec., 1918. Pp. 34. Translation of a report made by Sir Edward Holden, president of the London City and Midland Bank to the stockholders.

The Minnesota classification law. Bull. Nat. Tax Assoc., Mar., 1919. Pp. 3. The tax commission reports that this law of 1913, which assesses different classes of property at different percentages of the full value, has proved successful.

Proposed executive state budget. Calif. Taxpayers' Journ., Feb., 1919. Pp. 3. In support of a bill introduced in the California legislature.

The question of what Germany should pay towards the loss and cost of the war. Econ. Wld., Jan. 11, 1919. Pp. 3. Considers her ability to pay and the effect of these payments upon industry in allied countries.

Population and Migration

(Abstracts by A. B. Wolfe)

Belford, J. L. *The immorality of birth control.* Cath. Char. Rev., Apr., 1918. Pp. 3. The usual Catholic arguments against birth control.

Bodio, L. *Dei problemi del dopo guerra relativi all' emigrazione.* Giorn. d. Econ., Oct., 1918. Pp. 13. As demobilization will be slow, emigration will be resumed only gradually. It will avoid some of its former courses or will follow them only sparingly and will expand in the direction of the Adriatic and Mediterranean lands.

Brunhes, J. and Vallaux, C. *German colonization in eastern Europe.* Geog. Rev., Dec., 1918. Pp. 16. Colonization "through social control" in the Baltic Provinces, economic colonization in the Ukraine.

Courmont, J. *La guerre et la repopulation.* Le Musée Social, Memo. & Docs., Jan., 1918. Pp. 30. Comparison of French and German vital statistics, and a plea for a higher birth rate and a lower death rate in France. Appeal to fear of continued German peril in the future.

Dewavrin, M. *L'immigration aux Etats-Unis depuis 1914.* Rev. d'Econ. Polit., Sept.-Dec., 1918. Pp. 3. Predicts that scarcity of labor will cause the repeal of the literacy test.

Doucet, R. *Les migrations causées par la guerre.* Le Monde Econ., Aug. 10, 1918. Pp. 3. The south of France has gained in population; the devastated areas will again be the center of industry and dense population because of favorable location and naturally fertile soil; France will gain some foreign population brought in by the war.

Dublin, L. I. *The mortality of childhood.* Quart. Pub. Am. Stat. Assoc., Mar., 1918. Pp. 25. An important study by year of life and cause of death.

Ellis, H. *Birth control in relation to morality and eugenics.* Birth Control Rev., Feb., 1919. Pp. 2. Every attempt to discourage birth control promotes abortion.

Farnham, D. T. *Negroes a source of industrial labor.* Indus. Manag., Aug., 1918. Pp. 7. How to handle negro labor in industry. Of interest because of the wartime importation of southern negroes into northern factories. Does not consider the social or the deeper economic phases of the movement.

Goldstein, N. W. *Birth control as a socio-economic panacea.* Intern. Journ. Ethics, July, 1918. Pp. 6. Modern political economy has irrefutably and infallibly shown that overpopulation and poverty spring exclusively from social and economic sources.

Harrington, T. F. *Health in war industries.* Boston Medical & Surgical Journal, April 4, 1918. Pp. 5.

Haynes, G. E. *Negroes move North. I. Their departure from the South.* Survey, May 4, 1918. Pp. 8. Migration due not only to industrial conditions but to bad conditions in the South.

Huber, M. *Les territoires et les peuples enlevés à la Russie.* Journ. Soc. Stat. de Paris, May 1918. Pp. 5. A demographic survey of the territory surrendered by Russia in the Brest-Litovsk treaty.

Hunter, A. *Observations on the influenza epidemic.* Econ. World, Feb. 15, 1919.

Insolera, F. *Sulla misura dell'aumento di mortalità per effeto indiretto della guerra.* Riv. Ital. di Soc., Jan.-June, 1918. Pp. 7.

Jones, C. E. *A genealogical study of population.* Quart. Pub. Am. Stat. Assoc., Dec., 1918. Pp. 19. A valuable contribution to American vital statistics; based on family records.

Keegan, R. F. *The problem of illegitimacy.* Cath. Char. Rev., Nov., 1918. Reviews the illegitimacy statutes of Norway and Minnesota and a bill pending in the Illinois legislature.

Meuriot, P. *La population et la representation parliamentaire aux Etats-Unis.* Journ. Soc. Stat. de Paris, Nov., 1918. Pp. 13. A review of population growth in relation to political representation and the geographical distribution of Republican and Democratic strength.

Meuriot, P. *Le suicide à Paris avant et pendant la guerre.* Journ. Soc. Stat. de Paris, Oct., 1918. Pp. 15. A careful statistical study. Decline in the suicide rate which started in 1899 was sharply accentuated by the war.

Meuriot, P. *L'immigration contemporaine au Canada; son caractère nouveau et ses conséquences.* Journ. Soc. Stat. de Paris, June, 1918. Pp. 11. Thirty-seven per cent of the 3,000,000 immigrants, 1901-1916, have come from the United Kingdom, 35 per cent from the United States, as a result of an immigration policy designed to build up west Canada and counterbalance the French Canadians.

Meuriot, P. *Variété: Composition et répartition de la population étrangère en Suisse.* Journ. Soc. Stat. de Paris, Jan., 1918. Pp. 3. Nationality and

geographical distribution of the large influx of foreigners into Switzerland in the past 30 years.

NATHAN, E. *Lancashire vital statistics as disclosed by the last census.* Trans. Manchester Stat. Soc., 1917-18. Pp. 26. Discusses the unfavorable features of Lancashire mortality as compared with the rest of England. Constructs a Lancashire Life Table, 1912.

O'MALLEY, A. *Irish vital statistics in America.* Studies (Dublin), Dec., 1918.

POLLOCK, H. M. *Statistical work in the office of the Surgeon General of the Army.* Quart. Pub. Am. Stat. Assoc., June, 1918. Pp. 4. Discusses changes and extensions due to increase in the army in wartime.

POOCK, A. *Certain influences affecting the national rate of population.* Trans. Manchester Stat. Soc., 1917-1918. Pp. 28. Contains nothing new.

REUTER, E. B. *The superiority of the mulatto.* Am. Journ. Sociology, July, 1917. Pp. 24.

ROTH, L. V. *The growth of American cities.* Geog. Rev., May, 1918. Pp. 15. Comparative outline of the growth of the leading American cities.

SCHERESCHEWSKY, J. W. *Methods of prevention and control of disease in war industries.* Medical Record, Apr. 6, 1918. Pp. 3.

SCHROEDER, T. *Birth control and the great war.* Birth Control Rev., March, 1919. Pp. 5. Also, in *American Medicine,* December, 1918. An able article showing the results of the neo-feudal attitude on population and the vicious circle, population- trade- colonies- armies- population.

SINGH, MRS. ST. NIHIL. *Children; the greatest national asset.* Wealth of India, Sept., 1917.

WALLIS, B. C. *The people of Austria.* Geog. Rev., July, 1918. Pp. 14 and 5 folding maps. Physical configuration, distribution of the people, racial constitution, demographic and vital statistics, claims of the subject races.

WALLIS, B. C. *The peoples of Hungary: their work on the land.* Geog. Rev., Dec., 1917. Pp. 17. Geographical influence on peoples and industry.

WOODBURY, R. M. *Infant mortality studies of the Children's Bureau.* Quart. Pub. Am. Stat. Assoc., June, 1918. Pp. 24. A critical exposition of methods of investigation, and a constructive study of statistical results. A valuable article.

Rural property and the problem of colonization in Argentina. Intern. Rev. Agri. Econ., Apr., 1918. Pp. 8. Deals with the government's effort to encourage colonization and agriculture by discouraging land speculation. Concentration of land ownership in a few hands remains an evil.

Vital and sickness statistics for Germany and Austria during the war. Mo. Lab. Rev., May, 1918. Pp. 4. Review of German articles on the influence of the war on births and deaths.

Insurance and Pensions
(Abstracts by Henry J. Harris)

BELLOM, M. *Chronique des questions ouvrières et des assurances sur la vie.* Journ. Soc. Stat. de Paris, Dec., 1918. Pp. 3.

CLARK, L. D. *Lack of uniformity in compensation legislation.* Mo. Lab. Rev., Nov., 1918. Pp. 13. Excellent resumé of the bizarre features of our American laws and of the crying need for improvement.

ENGLAR, D. R. *The "proximate cause" of accident in marine insurance.* Econ. World, Feb. 1, 1918. Pp. 3. Decisions on this point including accidents due to war causes.

ENGLAR, D. R. *The "proximate cause" of accident in marine insurance.* Am. Underwriter, Feb., 1919. Pp. 6.

GEBHART, W. F. *Meeting the question of government insurance.* Econ. World, Jan. 25, 1919. Pp. 2. Question is now a live issue; private insurance should prepare to meet it.

KINGSTON, G. A. *"Arising out of and in course of employment."* Mo. Lab. Rev., Nov., 1918. Pp. 13. English, American, and Canadian rulings.

LANGSTAFF, M. P. *The war-time experience of the Canadian life insurance companies.* Econ. World, Jan. 18, 1919. Pp. 3. Market value of securities has seriously decreased. The mortality has increased from 25 to 30 per cent. Expense ratio has increased. At first the dividends on participating policies were kept up to the usual rate, but have lately been scaled down.

LAPP, J. A. *Health and old age insurance in Ohio.* Am. Lab. Legis. Rev., Mar., 1919. Pp. 11. Summary of the information collected by the Ohio commission.

LINDSAY, S. M. *Next steps in social insurance in the United States.* Am. Lab. Legis. Rev., Mar., 1919. Pp. 7. War risk insurance law should be starting point for life insurance for federal employees, for a system of health insurance for them and for the establishment of health, accident, invalidity and old age insurance for wage-earners.

McFEE, J. *An analysis of the government's war risk and converted regular life insurance of soldiers and sailors.* Econ. World, Mar. 1, 1919. Pp. 4. Based on recent circular of War Risk Bureau.

MEEKER, R. *Lacks in workmen's compensation.* Am. Lab. Legis. Rev., Mar., 1919. Pp. 11. Absence of laws in some jurisdictions, the intolerable position of the railway employees, the status of the maritime workers, the exclusion of many occupations, the methods of administration, etc., show that the operation of compensation laws in the United States is far from satisfactory.

RICE, E. E. *Group insurance for the industrial worker.* Indus. Manag., Mar., 1919. Pp. 3. Provisions to be included, methods of paying claims, cost and results.

STODDARD, C. F. *Hernia as a factor in workmen's compensation awards.* Mo. Lab. Rev., Nov., 1918. Pp. 14. Summary of laws, review of decisions and

awards, statistics of cases and proposal for more general use of medical examination when entering employment.

VOLL, J. A. *The liability insurance companies caught in outrageously profiteering against the national government in war contract work.* Am. Fed., Jan., 1919. Pp. 5. The government has been overcharged $1,575,578 on cantonment construction alone.

Direct settlements. Survey, Apr. 12, 1919. P. 1. This clause in the New York compensation has produced many cases of injustice to the injured workman.

Health insurance. Survey, Mar. 22, 1919. Pp. 2. Summary of Ohio commission's recommendations and of the features of the Davenport-Donahue bill in New York.

Statistics

DE BERONVILLE, L.DUGÉ. *Essai d'évaluation de la production industrielle en France avant la guerre.* Bull. Stat. Gén. de la France, Oct., 1918. Pp. 22.

CARR, E. B. *Comparison of food costs in 45 cities, September, 1917, to August, 1918.* Mo. Lab. Rev., Nov., 1918. Pp. 11.

COATS, R. H. *The national wealth and income of Canada, compared with other countries.* Econ. Wld., Feb. 8, 1919. Pp. 2. Valuable summary with exhaustive statistics.

GUILFOY, W. H. *Statistics of the epidemic of influenza in New York City.* N. Y. City Mo. Bull. Health Dept., Dec., 1918. Pp. 12.

MEURIOT, P. *Le recensement de l'an II.* Journ. Soc. Stat. de Paris, Feb., Mar., 1918. Pp. 22, 20.

PANGBURN, W. W. *Pulmonary tuberculosis among tenement dwellers in Boston.* The Commonwealth (Mass. State Dept. Health), Dec., 1918. Pp. 5.

PAPPS, P. C. H. *Effect of grouping in graduation by osculatory interpolation.* Quart. Pub. Am. Stat. Assoc., Dec., 1918.

SIXTEENTH LIST OF DOCTORAL DISSERTATIONS IN POLITICAL ECONOMY IN PROGRESS IN AMERICAN UNIVERSITIES AND COLLEGES

Students whose period of continuous non-residence exceeds three years are omitted from the list. The last date given is the probable date of completion.

The first list of this kind was dated January 1, 1904, and was sent to all members, but not regularly bound in the publications. The subsequent lists have appeared in the publications as follows:

Second list, 1905, in third series, vol. iv, p. 737.
Third list, 1906, in third series, vol. vii, no. 3, supplement, p. 43.
Fourth list, 1907, in third series, vol. viii, no. 2, supplement, p. 42.
Fifth list, 1908, in the *Bulletin* for April, 1908, p. 69.
Sixth list, 1909, in the *Bulletin* for April, 1909, p. 16.
Seventh list, 1910, in the *Bulletin* for March, 1910, p. 12.
Eighth list, 1911, in the Review for March, 1911, p. 212.
Ninth list, 1912, in the Review for June, 1912, p. 519.
Tenth list, 1913, in the Review for June, 1913, p. 527.
Eleventh list, 1914, in the Review for June, 1914, p. 524.
Twelfth list, 1915, in the Review for June, 1915, p. 476.
Thirteenth list, 1916, in the Review for June, 1916, p. 499.
Fourteenth list, 1917, in the Review for June, 1917, p. 485.
Fifteenth list, 1918, in the Review for June, 1918, p. 459.

Theory and Its History

Wilbur Pere Calhoun, Ph.B., Hiram, 1913; A.M., Michigan, 1914. Theories of imputation. 1919. *Michigan.*

Frieda Fligelman, A.B., Wisconsin, 1910. The principle of participation; a critique of "Les fonctiones mentales dans les sociétés inférieures," the thesis advanced by L. Levy-Bruhl. 1920. *Columbia.*

Joseph Bradley Hubbard, A.B., Wisconsin, 1912; A.M., 1913. History of economic thought during the Middle Ages. *Harvard.*

Hazel Kyrk, Ph.B., Chicago, 1910. The consuming process under the present industrial system. 1919. *Chicago.*

Leland Rex Robinson, A.B., Columbia, 1915. The social principle of municipal monopoly charges. 1920. *Columbia.*

George Herbert Roller, A.B., Ph.B., Northwestern College, 1910. The general economic theories underlying the decisions of the Supreme Court. 1920. *Columbia.*

J. Franklin Thomas, A.B., Beloit, 1904. Theories concerning the influence of physical environment upon society. 1919. *Columbia.*

Economic History and Geography

Alexander Mathews Arnett, A.B., Mercer, 1908; A.M., Columbia, 1913. The Populist movement with special reference to the state of Georgia. 1920. *Columbia.*

R. G. Booth, A.B., Illinois Wesleyan, 1914; A.M., Columbia, 1915. Some social aspects of the development of the natural sciences in England in the eighteenth century. 1919. *Columbia.*

Witt Bowden, A.B., Colorado, 1914. The rise of the great manufactures in England from 1760 to 1790. 1919. *Pennsylvania.*

Eleanor C. Buckley, A.B., Texas, 1908; A.M., Pennsylvania, 1909. The economic forces underlying Latin-American independence. 1920. *Pennsylvania.*

Merton Kirk Cameron, A.B., Princeton, 1908; A.M., Harvard, 1914. History of the tobacco growing industry in the United States. *Harvard.*

Anna C. Clouder, A.B., Bryn Mwr, 1905. The Napoleonic Wars as reflected on the commerce to Philadelphia and New York from 1806 to 1812. 1919. *Pennsylvania.*

Sarah White Davis, A.B., Mount Holyoke, 1909; M.A., 1910. A study of asserts in England during the thirteenth and fourteenth centuries. 1919. *Radcliffe.*

Frederick Charles Dietz, A.B., Pennsylvania, 1909; A.M., Harvard, 1912. The condition of the peasant in Würtemberg and the peasant revolt of 1525. *Harvard.*

Clarence G. Dittmer, Ph.B., Hamlin, 1910. A socio-economic survey of living conditions in North China. 1919. *Wisconsin.*

H. C. Engelbrecht, Concordia Seminary, 1917. Economic aspects of anti-clericalism in Southwest Germany during the fourteenth and fifteenth centuries. 1919. *Chicago.*

Priscilla Hawthorne Fowle, A.B., Vassar, 1916; A.M. Radcliffe, 1917. Boston journalism, 1830-1850. 1920. *Radcliffe.*

William E. Garnett, A.B., Cornell, 1913; A.M., Peabody, 1916. Rural social survey of Albemarle county, Virginia. 1919. *Wisconsin.*

J. E. Gillespie, A.B., Cornell, 1909; A.M., Harvard, 1910. The influence of oversea expansion on England to 1700. 1919. *Columbia.*

Howard Charles Green, A.B., College of the City of New York, 1902. The radical movement of the American Revolution. 1919. *Columbia.*

H. E. Grimshaw, B.S., Columbia, 1914; A.M., 1915. Influence on England of India under the rule of the Company. 1919. *Columbia.*

Joyce Oramel Hertzler, A.B., Baldwin-Wallace, 1916. The Jewish prophets and Apocalyptists as forerunners of the Utopians. 1919. *Wisconsin.*

Leland Jenks, A.B., Ottawa, 1913; A.M., Kansas, 1914. Social aspects of the Revolution of 1688-1689 in England. 1919. *Columbia.*

L. A. Lawson, A.B., Upsala, 1909; A.M., Columbia, 1911. Social conditions in the principate of Augustus. 1919. *Columbia.*

Lucy Lewis, A.B., Bryn Mawr, 1893; A.M., Pennsylvania, 1915. The continental systems and French industry. 1919. *Pennsylvania.*

A. S. NEUMANN, A.B., Columbia, 1909; A.M., 1912. Jewish communal life in Spain during the thirteenth century. 1919. *Columbia.*

ISABEL MCKENZIE, A.B., Barnard, 1912; A.M., Columbia, 1914. Social activities of English Friends in the period of industrial revolution. 1920. *Columbia.*

E. C. MACKLIN, A.B., Indiana, 1911; B.F., Union Theological, 1914. Social and philanthropic work of the church of Scotland in the 16th century. 1919. *Columbia.*

MAY BAKER MARSH, A.B., Michigan, 1908; A.M., 1910. Folkways in art. 1919. *Columbia.*

THOMAS P. MARTIN, A.B., Leland Stanford, 1913; A.M., California, 1914. The confirmation of foreign land titles in the acquired territory of the United States. *Harvard.*

R. L. MERIWEATHER, A.B., Wofford, 1912; A.M., Columbia, 1914. The southwest frontier, 1740-1776. 1919. *Chicago.*

PARKER T. MOON, B.S., Columbia, 1913. Development of the political and social program of the *Action Libérale* in modern France. 1920. *Columbia.*

LELAND OLDS, A.B., Amherst, 1912. Social unrest in England, 1811-1819. 1919. *Columbia.*

O. H. PANNKOKE, A.B., Concordia, 1905. The interrelation of the reformation and the social movement in Saxony. 1919. *Columbia.*

GIKO SAKAMOTO, B.S., Tung Wen College (Shanghai); A.M., Southern California, 1913. Economic history of Japan, 1868-1907. 1920. *Columbia.*

DONALD W. SAWTELLE, B.S., Maine, 1913; A.M., Wisconsin, 1915. A rural survey of Dane county, Wisconsin. 1920. *Wisconsin.*

H. L. SCOTT, PH.B., Denison, 1911. The social influence of oversea expansion on France to 1785. 1919. *Columbia.*

RUSSELL GORDON SMITH, A.B., Richmond, 1911; A.M., Columbia, 1914. A sociological study of opinion in the United States. 1919. *Columbia.*

O. C. STINE, PH.B., Ohio, 1908. Economic history of corn products in the United States. 1919. *Wisconsin.*

KRYIAKOS PAN TSOLAINOS, Bachelor of Commerce, American College of Smyrna; A.B., McGill, 1918. The economics of Homer. 1921. *Columbia.*

WILLIAM ERNEST WELD, A.B., College of Wooster, 1903; A.M., Princeton, 1908; B.D., Princeton Seminary, 1909. The economic development of India by better means of communication. 1920. *Columbia.*

LEVI EDGAR YOUNG, S.B., Utah, 1895. The social and economic development of Utah under the leadership of Brigham Young. 1920. *Columbia.*

Agriculture, Mining, Forestry, and Fisheries

O. C. AULT, A.B., Defiance, 1911. The peanut industry in the United States. 1919. *Wisconsin.*

Edgar Bernard Brossard, B.S., Utah Agricultural, 1911; M.S., Minnesota, 1917. Types of irrigation farming. 1919. *Minnesota.*

A. B. Cox, A.B., Texas, 1911; A.M., 1914. Land problems in northern Wisconsin. 1920. *Wisconsin.*

Wilber John Fraser, A.B., Illinois, 1893; S.M., 1902. Farm incomes in the dairy regions about the Elgin district in Illinois. *Harvard.*

Clarence L. Holmes, A.B., Michigan. History of land tenure in South Dakota. 1919. *Wisconsin.*

E. A. Kincaid, A.B., Washington State, 1910; M.A., Harvard, 1911. Land tenure in California. 1920. *California.*

Mabel T. Lee, A.B., Barnard, 1916; A.M., Columbia, 1917. Intensive agriculture in China. 1919. *Columbia.*

Paul Mehl, A.B., Oregon Agricultural College, 1915. National agricultural policies: what a nation produces. 1919. *Wisconsin.*

Frederic Earnest Richter, A.B., Harvard, 1913. The copper industry. *Harvard.*

Raleigh S. Rife, A.B., Doane, 1909. Cotton production and prices. 1919. *Princeton.*

Kurt von Schenk, A.B., Harvard, 1913. M.S. in Agriculture, Cornell, 1917. Agricultural income. 1919. *Cornell.*

R. P. Teele, A.B., Nebraska, 1897; M.A., 1899. Irrigation finance. 1921. *California.*

Thomas Jackson Woofter, Jr., A.B., Georgia, 1912. Negro farm life in Georgia. 1919. *Columbia.*

Ivan Wright, A.B., Iowa State, 1914; B.S., Michigan, 1916; M.S., 1917. Credit in agriculture. 1920. *Cornell.*

Manufacturing Industries

Homer Hoyt, A.B., Kansas, 1913; A.M., 1913. The building industry in the United States during the war. 1919. *Chicago.*

Robert Herbert Loomis, A.B., Clark, 1911. The shoe industry in Massachusetts since 1875. *Harvard.*

Maria Alexandria Stappert, A.B., St. Ursula College, Aix-la-Chapelle. Economic location of the textile industry in the United States. 1920. *Columbia.*

Transportation and Communication

H. A. Blankenship, A.B., Marietta, 1914. The Georgian Bay Ship canal. 1920. *Chicago.*

Yu Meng Chen, A.B., Nanking, 1914; A.M., Butler College, Indianapolis, 1916. Problems of ocean transportation. 1920. *Columbia.*

Charles Cloyd Creekpaum, A.B., Nebraska, 1912. Financial results of state railways. *Harvard.*

Howard Douglas Dozier, B.A., Vanderbilt, 1908; M.A., Yale, 1916. History of the Atlantic Coast Line System. 1919. *Yale.*

Robert Craig Effinger, A.B., Virginia, 1914. Railways and business cycles. 1920. *Columbia.*

Harold Adams Innis, A.B., McMaster, 1916; A.M., 1918. History of the Canadian Pacific Railroad. 1920. *Chicago.*

Sidney L. Miller, A.B., Kansas State Normal College, 1912; A.M., Wisconsin, 1916. Railroad credit. 1919. *Wisconsin.*

L. C. Sorrell, A.B., Colgate, 1911. Private car lines. 1920. *Chicago.*

W. M. W. Splawn, A.B., Baylor, 1906; A.B., Yale, 1908; A.M., 1914. A study of the railroad commission in Texas. 1919. *Chicago.*

Henry W. Van Pelt, A.B., Cornell, 1915; A.M., Columbia, 1917. Local freight discriminations. 1919. *Columbia.*

Trade, Commerce, and Commercial Crises

Everett Clair Bancroft, B.A., Acadia, 1914; Yale, 1915. Trade relations of Canada with the United Kingdom. 1920. *Yale.*

Joshua Bernhardt, B.A., Rochester, 1916. Government control of sugar during the war. 1920. *Johns Hopkins.*

Harry Alonzo Brandt, B.A., Pomona, 1914. The hide and leather trade. 1920. *Yale.*

Wilfred Eldred, A.B., Washington and Lee, 1909; A.M., Harvard, 1911. The regulation of wheat and flour prices and trade during the war. *Harvard.*

Henry Ernst Erdman, B.S., South Dakota State, 1912. Coöperative and municipal marketing of whole milk in the United States and abroad. 1919. *Wisconsin.*

Leighton George Foster, A.B., Lawrence, 1912; A.M. Wisconsin, 1916. Methods of marketing Wisconsin livestock. 1919. *Wisconsin.*

Joseph Henry Foth, A.B., Oklahoma, 1914; A.M., 1914. Trade associations. 1920. *Chicago.*

Milton Hyrum Harris, A.B., Brigham Young, 1915; A.M., Columbia, 1917. Relation of foreign investments and commerce. 1920. *Columbia.*

Jacob Paul Heritage, B.S., Pennsylvania, 1910; A.M., 1918. Terminal markets. 1921. *Pennsylvania.*

Allen Dunning Jennings, A.B., St. Stephens, 1913. Milk supply of New York City. 1919. *Columbia.*

Loyd Helvetius Langston, A.B., Maryville, 1913. Market distribution. 1920. *Columbia.*

Elmer Serano Nelson, A.B., Southern California, 1917. The foreign commericial policy of the United States as it affects its trade relations with the Argentine Republic. 1920. *Yale.*

Andrew J. Newman, A.B., Washington, 1910; M.A., Missouri, 1911. Historical and statistical survey of the port of San Francisco. *California.*

GRACE LEE NUTE, A.B., Smith, 1917; A.M., Radcliffe, 1918. American foreign commerce, 1830-1860. 1920. *Radcliffe.*

LEONA MARGARET POWELL, A.B., Ohio Wesleyan, 1905. The mail order house. 1919. *Chicago.*

HUGH BRUCE PRICE, B.A., Wisconsin, 1914; M.A., Minnesota, 1916. The inspection and grading of grain. 1920. *Yale.*

WILLIAM CHARLES SCHLUTER, A.B., Iowa State, 1915; A.M., Columbia, 1916. A study in business cycles: the industrial conditions of Germany, France, England and the United States from 1907 to July, 1914. 1919. *Columbia.*

CHONG SU SEE, B.S., Columbia, 1915; A.M., Columbia, 1916. The foreign trade of China. 1919. *Columbia.*

JACOB VINER, A.B., McGill, 1914; A.M., Harvard, 1915. The international trade and economic history of Canada, 1900-1914. *Harvard.*

HAROLD B. WARD, S.B., Chicago, 1914. Geographic influence in the trade between the United States and South America. 1919. *Chicago.*

HOLBROOK WORKING, A.B., Denver, 1915. A study of the effects and possible future application of price-fixing in the case of wheat. 1920. *Cornell.*

D. Y. YAPP, A.B., Swarthmore, 1916. Foreign trade of China. *Pennsylvania.*

Accounting, Business Methods, Investments, and the Exchanges

CLARENCE E. BONNETT, S.B., Missouri, 1908. Employers' associations. 1919. *Chicago.*

EDMUND WILLIAM BRADWIN, A.M., Queen's, 1914. Contract system on railroad construction. 1919. *Columbia.*

LORAIN FORTNEY, A.B., LL.B., West Virginia, 1900. Warehousing. 1919. *Chicago.*

WILLIAM D. GORDON, B.S., Pennsylvania, 1916. Scientific control of stores. 1920. *Pennsylvania.*

LLOYD W. MAXWELL, A.B., Oklahoma, 1912; A.M., Columbia, 1916. Government regulation of prices. 1920. *Columbia.*

NINA MILLER, A.B., Wisconsin, 1915; M.S., Columbia, 1918. Analysis of financial reports. 1920. *Columbia.*

CLAUDIUS TEMPLE MURCHISON, A.B., Wake Forest College, 1911. Resale price maintenance. 1919. *Columbia.*

FRANK PARKER, B.S., Pennsylvania, 1911; LL.B., 1915. Theories of depreciation applied to public utilities. 1920. *Pennsylvania.*

JOHN W. RIEGEL, B.S., Pennsylvania, 1918. Uniform accounting systems for basic industries. 1921. *Pennsylvania.*

REXFORD G. TUGWELL, B.S., 1915, Pennsylvania; A.M., 1916. The public interest and the price for milk. 1920. *Pennsylvania.*

Capital and Capitalistic Organization

William Lewis Abbott, A.B., Pennsylvania, 1911; A.M., LL.B., 1913. The effect of combinations on the wholesale grocery trade. 1920. *Pennsylvania.*

Leonora Arent, B.D.I., Iowa State Teachers College, 1911; A.B., Iowa State University, 1917. Electric franchises in New York City. 1919. *Columbia.*

James Cummings Bonbright, A.B., Northwestern, 1913. Commission regulation of public utility securities. 1919. *Columbia.*

Harry James Carman, Ph.B., Syracuse, 1913; A.M., 1914. The street railway franchises in New York City. 1919. *Columbia.*

George J. Eberle, A.B., Wisconsin, 1914. The economics of electric railway fares. 1919. *Wisconsin.*

L. A. Frye, A.B., Minnesota, 1907; A.M., 1908. History of the state control of public service corporations in New York. 1919. *Columbia.*

Edgar H. Gustafson, A.B., North Dakota, 1915; A.M., 1916. Economic principles in the valuation of public service corporations. 1919. *Wisconsin.*

Russell Donald Kilborn, A.B., Michigan, 1915; A.M., 1916. The essential conditions for effective monopoly control. 1919. *Michigan.*

Walter Jeffries Matherly, A.B., William Jewell, 1915; A.M., Washington, 1916. Surplus earnings in public service corporations. 1920. *Chicago.*

Charles Stillman Morgan. Methods of promoting and awarding efficiency in the management of public utilities. 1920. *Yale.*

Jonas W. Stehman, A.B., Lebanon Valley, 1909; A.M., Pennsylvania, 1910. History of the American Telephone and Telegraph Company. 1920. *Chicago.*

Floyd L. Vaughan, A.B., Texas, 1913; A.M., 1914. Relation of patents to industrial monopolies. 1919. *Wisconsin.*

Labor and Labor Organizations

Horace Richards Barnes, A.B., Pennsylvania, 1911; M.A., 1913. An economic interpretation of society's attitude toward child labor. 1920. *Pennsylvania.*

Clyde Elmore Burgee, A.B., Western Maryland, 1914. Social activities of trade unionism. 1920. *Johns Hopkins.*

Agnes Mary Byrnes, A.B., Northwestern, 1915; A.M., Columbia, 1916. Industrial home-work in Pennsylvania. 1919. *Bryn Mawr.*

Elizabeth Leland Chamberlain, A.B., Mt. Holyoke, 1914. The International Cigar Makers' Union. 1919. *Chicago.*

Nathan Fine, Ph.B., Chicago, 1915. Labor and politics. 1919. *Chicago.*

Alfred P. Haake, A.B., Wisconsin, 1914; A.M., 1916. Wage measurements and the management of labor. 1919. *Wisconsin.*

Emilie Josephine Hutchinson, A.B., Barnard, 1905; A.M., Columbia, 1908.

Minimum wage legislation as a solution of the wage problem. 1919. *Columbia.*

Richard Hines Lansburgh, B.S., Pennsylvania, 1915; A.M., 1916. Labor turnover. 1920. *Pennsylvania.*

Fred Thomas Lena, A.B., Dartmouth, 1907; A.M., Columbia, 1915. Economic significance of the entrance of women into industry. 1919. *Columbia.*

E. D. Lucas, A.M., Columbia; B.D., Union Theological. Factory conditions in the Punjab, India. 1920. *Columbia.*

James Hugh McKean, A.B., Michigan, 1916. Trade unions and the working day. 1921. *Johns Hopkins.*

Edward Becker Mittleman, A.B., Wisconsin, 1914. The history of labor in Chicago. 1919. *Chicago.*

Haynie H. Seay, A.B., Richmond, 1913; A.M., Columbia, 1915. Women and child labor conditions in Virginia. 1920. *Johns Hopkins.*

Benjamin M. Squires, A.B., Wisconsin, 1913; A.M., 1914. Canadian industrial disputes investigation act. 1919. *Columbia.*

Archibald Herbert Stockder, A.B., Colorado, 1915; A.M., 1916. Productivity of labor in the bituminous coal industry. 1920. *Columbia.*

Alfred H. Williams, B.S., Pennsylvania, 1915. The influence of the present war on organized labor's share in the management and profits of industry. 1920. *Pennsylvania.*

Money, Prices, Credit, and Banking

Lloyd Vernor Ballard, A.B., Beloit, 1912; A.M., Harvard, 1913. Trade acceptances. 1919. *Chicago.*

Thomas Andrew Beal, A.B., Utah, 1906; A.M., Columbia, 1910. The importance of trade and bankers' acceptances in business. 1920. *Columbia.*

Harry Francis Grady, A.B., St. Mary's, Baltimore, 1907. The development of commercial paper under the federal reserve system. 1919. *Columbia.*

Frank Dunstone Graham, A.B., Dalhousie, 1913; LL.B., 1915. Period of suspension of specie payments in the United States, 1862-1879. *Harvard.*

Ray Ovid Hall, Banking in China. 1919. *Columbia.*

Leonard B. Krueger, Ph.B., Wisconsin, 1914; A.M., Pennsylvania, 1915. Inflation. 1919. *Wisconsin.*

Ray Victor Leffler, A.B., Michigan, 1915: A.M., 1917. The position of New York in international finance. 1920. *Michigan.*

Joseph Lee McDonald, A.B., Indiana, 1915. Economic limits to the use of the trade acceptance. 1921. *Pennsylvania.*

Robert Elwood Moore, A.B., Wesleyan, 1915; A.M., 1916. An investigation of the relation of iron prices to business conditions. 1919. *Columbia.*

Jesse Hale Riddle, A.B., Davis-Elkins, 1912; A.M., Princeton, 1915. History of state banks and trust companies in New Jersey. 1919. *Princeton.*

Thomas Bruce Robb, B.A., Park, 1912; M.A., Yale, 1914. Government insurance of bank deposits in the United States. 1919. *Yale.*

Norman John Silberling, A.B., Harvard, 1914; A.M., 1915. A history of British theories of money and credit, 1776-1848. *Harvard.*

William Howard Steiner, B.S., Columbia, 1916; A.M., 1917. State banks and the federal reserve system. 1919. *Columbia.*

Marjorie Tappan, A.B., Cornell. Institution of credit. 1919. *Columbia.*

Pei Chien Yang, A.B., Michigan, 1917; A.M., 1918. The position of the Federal Reserve Board in the American banking system. 1919. *Michigan.*

Public Finance, Taxation, and Tariff

Rhimarao Eamjo Ambedkar, A.B., Bombay, 1912. Financial history of India. 1920. *Columbia.*

Frank Ferris Anderson, A.B., Minnesota, 1908. The industrial claims of the single-taxers. 1920. *Columbia.*

Ralph Eastman Badger, B.A., Dartmouth, 1913; M.C.S., 1914. The taxation of tangible personal property under the property tax. 1920. *Yale.*

Bascom W. Barnard, A.B., Trinity (N. C.), 1915; A.M., 1916. Government improvements of rivers and harbors. *Princeton.*

Arthur Eugene Buck, Ph.B., Milligan, 1910; B.S., Tennessee, 1913; A.M., Columbia, 1917. New York budget law. 1919. *Columbia.*

John Ksing Cheng, B.S., St. John's (Shanghai), 1917; A.M., Ohio State, 1918. Government finance in China under the Republic, with suggested reforms. 1920. *Columbia.*

Chungtao Tahmy Chu, A.B., Harvard, 1917. The taxation of salt. *Harvard.*

Kocheng C. Chung, A.B., Reed, 1917. Napoleonic war finance in England. 1920. *Columbia.*

Rebekah P. Davis, B.S., Pennsylvania, 1915. The Philadelphia budget. 1920. *Pennsylvania.*

Le Grand Rex Drown, A.B., Wooster, 1915; A.M., Columbia, 1916. The validity of the pay-as-you-go policy school outlays. 1919. *Columbia.*

Felix Fluegel, A.B., Stanford, 1914; M.A., California, 1917. Types of income tax laws. 1919. *California.*

Margaret Chase Going, B.A., McGill, 1912; M.A., 1913. The financial history of Montreal. 1919. *Chicago.*

Clarence Heer, A.B., Rochester, 1914. Taxable income. 1920. *Columbia.*

Feng Hua Huang, A.B., Wisconsin, 1917; A.M., 1917. Public debts in China. 1919. *Columbia.*

Jens Peter Jensen, A.B., Dakota Wesleyan, 1913; A.M., Minnesota, 1917. Twenty years of federal finance, 1897-1916. 1920. *Chicago.*

Homin Leopold Lin, A.M., Teachers College, 1917. Administration of the real estate tax in New York City. 1920. *Columbia.*

Wallace Mitchell McClure, A.B., LL.B., Tennessee, 1911. Public finance in Tennessee. 1920. *Columbia.*

A. R. Mead, A.B., Miami; A.M., Columbia, 1910. The development of the free school and the abolition of rate bills in the states of Connecticut and Michigan. 1919. *Columbia.*

Anna Marguerite Michner, A.B., Swarthmore, 1916. The budget system of Frankfort-on-the-Main. 1920. *Columbia.*

Eugene I. Omeltchenko, Polytechnical Institut, Petrograd. Reciprocity of the United States in Germany and France. 1921. *Columbia.*

N. M. Pal, B.S., California, 1916; M.S., 1918. Systems of land tenure and taxation in India. 1921. *California.*

Lloyd Preston Rich, A.B., Wesleyan, 1913; A.M., Harvard, 1914. History of taxation in Connecticut. *Harvard.*

John Valentine Van Sickle, A.B., Haverford, 1913. History of taxation in Massachusetts since 1860. *Harvard.*

Kossuth Mayer Williamson, A.B., Alabama, 1913; A.M., Harvard, 1914. The history of federal internal taxation since 1871. *Harvard.*

Population and Migration

J. C. Bell, Jr., A.B., Princeton, 1912. Migrations to the Northwest, 1880-1850. 1919. *Columbia.*

Louis Bloch, A.B., Wisconsin, 1916; A.M., 1917. Immigration. 1920. *Columbia.*

R. S. Castleman, Ph.B., Chicago, 1914. Early emigration from Spain to America. 1919. *Chicago.*

Alice Squires Cheyney, A.B., Vassar, 1909. Community problems in Pennsylvania towns, with special reference to the assimilation of varied racial groups. 1919. *Pennsylvania.*

Stanley Powell Davies, A.B., Bucknell, 1912. Racial assimilation in a community in the anthracite coal region. 1919. *Columbia.*

J. O. Hall, A.B., Denver, 1903; A.M., 1905. The Norse immigration. 1920. *Columbia.*

Jacub Horak, Ph.B., Chicago, 1916. A study of the Czecho-Slovak community of Chicago. 1920. *Chicago.*

E. B. Reuter, A.B., Missouri, 1910; A.M., 1911. The mulatto; a sociological and psychological study. 1919. *Chicago.*

B. M. Stewart, A.M., Queen's, 1911. Immigration settlement in Canada before Confederation. 1919. *Columbia.*

Donna Fay Thompson, A.B., Indiana, 1913; A.M., 1914. The birth rate in college graduates' families. 1919. *Columbia.*

Amy Eaton Watson, A.B., Brown, 1907; A.M., Pennsylvania, 1910. Illegitimacy—its causes and cure. 1919. *Bryn Mawr.*

Social Problems and Reforms

Georgia Louise Baxter, A.B., Denver, 1914; A.M., California, 1917. Study of desertion and non-support. 1919. *Bryn Mawr.*

H. H. Beneke, A.B., Miami, 1909; A.M., Chicago, 1912. The concept of graft. 1919. *Chicago.*

Hubert Emerson Bice, B.A., Ohio State, 1909; A.M., 1913. The unemployable. 1920. *Ohio State.*

C. D. Blachly, Ph.B., Grinnell, 1908. A study of the types of literature in social study classes of protestant churches. 1920. *Chicago.*

Margaret G. B. Blachly, Ph.B., Chicago, 1912. Present tendencies in social reform. 1919. *Chicago.*

Archibald B. Clark, A.B., Reed, 1916. The popular vote as an index of social solidarity. 1919. *Columbia.*

Alzada Comstock, A.B., Mt. Holyoke, 1910; A.M., Columbia, 1913. The newspaper publishing business. 1920. *Columbia.*

Frieda Opal Daniel, A.B., Drake, 1916. A social study of an industrial area. 1920. *Chicago.*

Harmon, O. De Graff, B.Di., Iowa State Teachers College, 1908; B.A., State University of Iowa, 1916; M.A., 1918. The sociological aspects of the primitive dance. *State University of Iowa.*

Charles Dice, A.B., Ohio Northwestern, 1905; A.M., Northwestern, 1913. New factors affecting the motive to save. 1919. *Wisconsin.*

Z. T. Egartner, A.B., Cincinnati, 1914. Race prejudice in the United States of America. 1919. *Chicago.*

Earl Stanfield Fullbrook, B.A., Morningside, 1914; M.A., State University of Iowa, 1918. The origin and development of the Red Cross movement. *State University of Iowa.*

William Earl Givens, A.B., Indiana, 1913. The social value of the Chatauqua movement. 1919. *Columbia.*

John R. Hart, B.A., M.A., Pennsylvania, 1911. Economic waste in the distribution of Protestant churches. 1921. *Pennsylvania.*

Cary Walker Hayes, A.B., Washburn, 1909; A.M., Columbia, 1912. Public morals and recreation; a municipal program. 1919. *Columbia.*

C. C. Jansen, A.B., Taylor, 1913; A.M., Kansas, 1914. The Americanization of the German Russian Mennonites in central Kansas. 1919. *Chicago.*

Glenn R. Johnson, A.B., Reed, 1915. The American newspaper as an indicator of social forces. 1919. *Columbia.*

Roy Hinman Holmes, A.B., Hillsdale, 1911; A.M., Michigan, 1912. The influence of modern communication upon the rural community. 1920. *Michigan.*

Kinai Matsuno, A.B., Keio University, 1915; A.M., Columbia, 1918. The principle and practice of efficiency in Japan and in the United States. 1920. *Columbia.*

Sumis Mesugi, A.M., Chicago, 1916. The family in Japan. 1919. *Chicago.*

Hazel Grant Ormsbee, A.B., Cornell, 1915. Vocational guidance in the United States with special study of Philadelphia working children. 1921. *Bryn Mawr.*

Rebecca Osler, A.B., Swarthmore, 1913; A.M., Wisconsin, 1916. Protection of professional standards. 1919. *Wisconsin.*

Mabel B. Palmer, B. L., California, 1908; M.L., 1912. Spanish phonography. 1920. *California.*

Herbert Newhard Shenton, A.B., Dickinson, 1906; A.M., 1909; B. D., Drew, 1910. Collective decision. 1920. *Columbia.*

William C. Smith, A.B., Grand Island, 1907; A.M., Chicago, 1912. Special aspects of the Salvation Army movement. 1919. *Chicago.*

Raleigh W. Stone, M.S., Valparaiso, 1914. The rural survey. 1919. *Chicago.*

F. M. Thrasher, A.B., DePauw, 1915; M.A., Chicago, 1918. Boy Scout movement. 1919. *Chicago.*

Mary Van Kleeck, A.B., Smith, 1904. The fact basis for industrial reform. 1919. *Columbia.*

A. C. Zumbrunnen, A.B., Central, 1907; A.M., Missouri, 1909. The community church as a type of denominational union. 1919. *Chicago.*

Insurance and Pensions

T. Coulston Bolton, B.S., Pennsylvania, 1912; A.M., 1917. Assignment of life insurance policies. 1920. *Pennsylvania.*

Charles Gauger, A.B., Pennsylvania, 1908. Economic aspects of accident and health insurance. 1920. *Pennsylvania.*

Edith Scott Gray, A.B., Oberlin, 1911; A.M., 1912. Systems of workingmen's compensation in practice. 1919. *Chicago.*

Charles K. Knight, A.B., Ohio University, 1912; A.M., 1918. History of life insurance in the United States. 1920. *Pennsylvania.*

Edward Laurence McKenna, A.B., Columbia, 1913; A.M., Illinois, 1914. Title insurance in the United States. 1920. *Pennsylvania.*

Paul Studensky, Gymnasium, Petrograd, 1896-1905; University of Petrograd, 1905-1908; University of Sorbonne, 1908-1909; New York University, 1915-1917; Columbia, 1917. Teachers' retirement systems in the United States. 1919. *Columbia.*

George Livingston Williams. Industrial pensions as applied to the leading industries of the United States. 1920. *Columbia.*

Suekichi Yoshida, Shogakushi (A.B.), Waseda University, Japan, 1916. War risk life insurance in the United States. 1920. *Johns Hopkins.*

Pauperism, Charities, and Relief Measures

Porter R. Lee, A.B., Cornell, 1903. Public outdoor relief in the United States. 1919. *Columbia.*

Statistics and Its Methods

Che Kwei Chen, A.B., Cornell, 1918. Census plan for a Chinese province. 1919. *Cornell.*

Frank Alexander Ross, Ph.B., Yale, 1908; A.M., Columbia, 1913. A study of the application of statistical methods to sociological problems. 1920. *Columbia.*

NOTES

Since February 1 the following names have been added to the membership of the American Economic Association:

Adams, Joseph, 7 Lewis Road, Winchester, Mass.
Allen, R. M., 227th St. and Arlington Ave., Spuyten Duyvil, N. Y.
Babu Shiva, Mandan, Sohu St., Benares, India.
Bradley, Albert, Y. M. C. A., Detroit, Mich.
Brinton, Willard C., 21 East 40th St., New York, N. Y.
Bruere, Robert W., 465 West 23d St., New York, N. Y.
Burkhard, E. E., 1153 Magnolia Ave., Elizabeth, N. J.
Burnet, Philip, DuPont Bldg., Wilmington, Del.
Canan, Charles H., Transportation Bldg., Montreal, Canada.
Chamberlain, Elizabeth L., University of Texas, Austin, Texas.
Chassell, E. D., 112 W. Adams St., Chicago, Ill.
Clark, Floyd B., College Station, Texas.
Cleland, J. S., Carroll College, Waukesha, Wis.
Conyngton, Thomas, 20 Vesey St., New York, N. Y.
Copeland, Charles C., Freeport, N. Y.
Das, Rajani Kanta, 6933 S. Chicago Ave., Chicago, Ill.
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Foley, Daniel, 228 Court Road, Winthrop, Mass.
Freeland, Willard E., Hotel Duncan, New Haven, Conn.
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At the twenty-fourth annual meeting of the Michigan Academy of Science Professor Frank T. Carlton, of Albion College, was elected president and Professor I. L. Sharfman, of the University of Michigan, was elected vice president in charge of the Section of Economics. The subject of the presidential address by Professor Carlton was "The human element in industry." Among the papers read before the Section of Economics was one on "Pelatiah Webster and the Revolutionary currency," by Earl V. Dye, and one on "Trading policies of trading nations during the nineteenth century," by Henry C. Adams.

At the second annual meeting of the Ohio Academy of Social Sciences, held April 18-19, 1919, papers were presented by H. G. Williams on "Taxation changes needed in educational administration"; and by Clarence D. Laylin on "Taxation problems before the joint committee on taxation, Ohio General Assembly."

A special meeting of the American Statistical Association was held in New York City on March 28 at which there was a discussion on "Some phases of war statistics."

The Taylor Society has opened a permanent office in the Engineering

Societies' Building, 29 West 39th St., in charge of Professor H. C. Person, formerly of the Tuck School of Administration and Finance at Dartmouth College.

The National Industrial Conference Board has sent a commission to Europe to study industrial economic problems. Professor J. Laurence Laughlin has accompanied the commission as director of research.

A movement is under way for organizing councils in the larger cities of the country to promote the use of acceptances. The executive committee of the American Acceptance Council, a national body, has a wide membership, with Lewis E. Pierson, of the Irving National Bank of New York, serving as president and Paul M. Warburg serving as chairman.

The Industrial Service Movement (347 Madison Ave., New York) has issued a circular on *Suggested College Course on the Human Side of Engineering.* The circular contains lists of bibliographical references on the various phases of industrial organization.

The committee on Hart Schaffner & Marx economic studies announces the following lists of subjects for the prize competition, essays being due June 1, 1920: "On what economic basis can a League of Nations be permanently established?"; "The future of the food supply"; "A study of the means and results of economic control by the Allies during the European War"; "The effects of governmental action in the United States on the competitive system"; and "A study of the effects of paper money issues during the European War." The circular also gives two pages of other available subjects. Inquiry may be directed to J. Laurence Laughlin, University of Chicago, Chicago, Illinois.

The War College Division of the War Department announces the publication of an official history of the war with Germany. As outlined, the history will comprise eighteen volumes of approximately 250,000 words each, presenting a descriptive and pictorial history of the military, diplomatic, and economic activities of the United States during the war. Four volumes will cover the economic organization. The treatment will be narrative. The first volume of this division will describe the early emergency measures which were taken in attempts at financial, industrial, and military mobilization; the second will deal with the formation of the basic policies; the third, with the development of measures of conservation; and the fourth, with the final workings of the program of procurement. The section dealing with

economic studies has already published a brief monograph giving a synopsis of the economic processes of the war and is planning the publication of a handbook of all economic agencies that were concerned in the war organization.

Volume XIII of the *Papers and Proceedings of the American Sociological Society* includes papers and discussions presented at its meeting held in Richmond last December.

In the *Educational Review* for February, 1919, Professor Charles A. Ellwood has an article on "Reconstruction of education upon a social basis." He recommends that more attention be given to social studies in the curricula of schools and colleges.

Harvard University Press will shortly publish a volume on *The Italian Emigration of our Times*, by Professor Robert F. Foerster, of Harvard University.

Professor Louis Levine, of the department of economics at the University of Montana, has been suspended from service in that institution on account of the publication of a report on mine taxation in Montana. This has resulted in much criticism of the action of the authorities of that institution, and the Association of University Professors has appointed a committee of investigation.

Professor Fred R. Fairchild, of Yale University, has resigned as secretary of the National Tax Association and editor of its *Bulletin*. Mr. A. N. Holcomb, president of the association, will temporarily undertake the editorship of the *Bulletin*.

The Princeton Economics Seminary has just completed a cumulative bibliography of the articles listed in the American Economic Review from the date of the first issue and will keep this bibliography up to date.

Professor Ralph E. Heilman, due to the pressure of other work, has been obliged to give up the work of preparing abstracts of periodical articles on the subject of public utilities in this Review. Mr. Charles S. Morgan, associate economist in the Bureau of Standards of the Department of Commerce, has kindly accepted this responsibility.

Dr. Lewis H. Haney has resigned from the economics staff of the Federal Trade Commission, with which he has been connected for the last three years, and will act as economic advisor to the Southern Wholesale Grocers' Association, with headquarters at Jacksonville, Florida. He will organize and be the first head of the association's

new bureau of research and publicity. This bureau proposes, through expert assistance, to establish the facts with respect to economic conditions and tendencies in the distribution of food products in the United States which are or may be contrary to public welfare.

The Library of Congress is about to issue a *Select List of References on Economic Reconstruction,* including reports of the British Ministry of Reconstruction, compiled under the direction of H. H. B. Meyer, chief bibliographer. This will contain 175 entries.

Miss Laura A. Thompson, librarian of the Department of Labor at Washington has prepared a *Supplementary List of References on Reconstruction* (typewritten, pp. 42).

The Russian Information Bureau in the United States (Woolworth Bldg., New York City) is issuing a magazine entitled *Struggling Russia,* opposed to Bolshevism.

The *American Labor Legislation Review* for March, 1919, is devoted to the subject of labor and reconstruction. It includes the addresses presented at the last annual meeting, held in Richmond.

In the January issue of *The Alumni Quarterly* of the University of South Dakota is an article on "The evolution of economics at the University of South Dakota," by Professor Frank T. Stockton. The article traces the development of the teaching of economics in that institution and gives some account of the careers and publications of the men who have had charge of the department.

The *Intercollegiate Socialist* for April-May, 1919, notes that the quarterly will be developed into a more comprehensive monthly, to be known as the *Socialist Review.* This will be primarily "a magazine of accurate information and vital discussion rather than a journal of opinion."

Announcement is made of the publication of a new weekly journal entitled *The Review,* to be edited by Fabian Franklin and Harold de Wolf Fuller (140 Nassau St., New York).

A new monthly journal, the *Trade Acceptance Journal,* was established in 1918 by the National Trade Acceptance Bureau, Inc., to promote the use of trade acceptances (Tribune Bldg., New York City, price $3 a year).

The American International Corporation has begun the publication of a house *Bulletin* in which there is considerable information in regard to foreign trade (120 Broadway, New York City).

The Social Service Council of Canada has begun the publication of a monthly journal entitled *Social Welfare* (Toronto, Confederation Life Bldg.).

Since the preparation of the lists of new books the following have been received:

Paul F. Brissenden, *The I. W. W.: A Study of American Syndicalism* (New York: Longmans, Green & Co.).

Thomas N. Carver, *War Thrift* (New York: Oxford University Press).

Barry Cerf, *Alsace-Lorraine since 1870* (New York: Macmillan).

Frederick A. Cleveland and Joseph Schafer, *Democracy in Reconstruction* (Boston: Houghton, Mifflin).

C. E. Grunsky, *Public Utility Rate Fixing* (San Francisco: Technical Publishing Co.).

Louis Levine, *The Taxation of Mines in Montana* (New York: B. W. Huebsch).

Slavko Secerov, *Economic Phenomena Before and After War. A Statistical Theory of Modern Wars* (London: George Routledge & Sons, Ltd.).

Lionel Smith-Gordon and Laurence C. Staples, *Rural Reconstruction in Ireland* (New Haven: Yale University Press).

J. Russell Smith, *Influence of the Great War upon Shipping* (New York: Oxford University Press).

John Spargo, *Bolshevism* (New York: Harper & Bros.).

William G. Sumner, *The Forgotten Man, and Other Essays* (New Haven: Yale University Press).

A. G. Thomas, *Principles of Government Purchasing* (New York: Appleton & Co.).

A. Hyatt Verrill, *South and Central American Trade Conditions of Today* (New York: Dodd, Mead & Co.).

Appointments and Resignations

Dr. Edith Abbott has taken leave of absence both from the University of Chicago and from the School of Civics and Philanthropy, for the spring quarter, to do special research work in England for the Carnegie Endowment.

Mr. O. C. Ault, formerly professor of economics in the University of Florida and who has recently held a fellowship at the University of Wisconsin, will succeed Dr. L. C. Gray as professor of rural economics in George Peabody College for Teachers.

Dr. John Bauer has resigned his position as assistant professor in the department of economics at Princeton University.

Mr. Joshua Bernhardt, fellow in political economy in the Johns Hopkins University, is continuing his work as chief statistician of the Sugar Division of the Food Administraton.

Dr. Francis H. Bird, recently connected with the Industrial Service Section of the United States Ordnance Department and with the National War Labor Board, is giving the course in labor problems at Dartmouth College during the present quarter.

Professor John E. Brindley, of Iowa State College, has been appointed tax expert for the recently authorized Code Commission of Iowa. The duties of this commission are to arrange the tax sections of the code in logical order, cut out duplications and redraft sections, and to suggest necessary and desirable amendments to the present tax law.

Professor Frank H. Dixon, head of the department of economics at Dartmouth College, will leave next term to become professor of transportation at Princeton University.

Mr. George Eberle is absent from the University of Wisconsin being engaged in public utilities investigation work in Manitoba, Canada.

Mr. Wilfred Eldred, of Leland Stanford Junior University was employed by the Milling Division of the Food Administration after his discharge from the field artillery.

Mr. Lester R. Ford has been appointed instructor in life insurance at the Graduate School of Business of Harvard University for the year 1919-1920.

Dr. F. G. Franklin, who for nine years has been in Albany College, has been made head of the department of social science in Willamette University.

Professor F. B. Garver has returned to Leland Stanford Jr. University after serving in the Bureau of Planning and Statistics of the Shipping Board.

Dr. William F. Gephart has been elected vice president of the Third National Bank of St. Louis. He will retain his connection with Washington University for a year as acting dean of the School of Commerce and Finance.

Dr. L. C. Gray has resigned his position at the George Peabody

College for Teachers to accept a position as head of the Division of Land Tenure and Land Problems in the newly organized Office of Farm Management of the Department of Agriculture.

Professor J. Anton de Hass has been granted leave of absence from the University of Washington and has accepted the position of professor of foreign trade at the Commercial University of Rotterdam, Holland.

Professor Ralph H. Hess has been made Lieutenant Colonel in charge of administration records of the American Expeditionary Force in France. He will return to the University of Wisconsin in September, 1919.

Professor Jacob H. Hollander, of The Johns Hopkins University, delivered the Weil Lectures in American Citizenship at the University of North Carolina, May 5-7, upon the general subject "American citizenship and economic welfare."

Mr. J. B. Hubbard, special expert for the United States Tariff Commission, has been appointed for next year instructor in economics at Princeton University.

Mr. Harry Jerome, instructor in economics at the University of Wisconsin, has been granted leave of absence to accept a position as income tax assessor for Dane County, Wisconsin.

Professor Eliot Jones, who has been with the Central Bureau of Planning and Statistics, has returned to Leland Stanford Jr. University.

Assistant Professor O. W. Knauth has resigned from the department of economics at Princeton University.

Professor Don D. Lescohier is conducting local courses on Americanization in several cities of Wisconsin and will give a lecture course during the summer session at the University of Wisconsin, June 30 to August 8.

Lieut. J. G. McKay has returned to the University of Wisconsin as instructor in economics.

Mr. Paul Miller, of Michigan Agricultural College, has accepted an instructorship in the department of economics of the University of Minnesota.

Dr. Broadus Mitchell, formerly special staff writer of *The News Leader*, Richmond, Va., has been appointed instructor in political economy in The Johns Hopkins University.

Dr. F. W. Ogburn, head of the department of sociology at the University of Washington, Seattle, has resigned to accept a professorship in sociology at Columbia University.

Dr. Jesse S. Robinson, who has been directing educational work in cantonments under the Y. M. C. A., has been appointed to the chair of political economy and business administration at Simpson College, Indianola, Iowa.

Dr. Sumner Schlichter has been appointed an instructor in economics at Princeton University.

Professor Horace Secrist has returned to Northwestern University and has been promoted to a full professorship in economics and statistics.

Dr. Robert J. Sprague will return to the Massachusetts Agricultural College in September, 1919. He is now giving courses on government, the political and social aspects, under the army overseas education program.

Dr. N. I. Stone has accepted a position with the Hickey-Freeman Company, Rochester, N. Y., as employment manager.

Mr. Arthur E. Swanson has resigned his position as dean of the School of Commerce at Northwestern University and has taken a position with the Firestone Tire and Rubber Company of Akron, Ohio, where his duties will be mainly in the work of organization.

Dr. Frank W. Taussig, of Harvard University, chairman of the United States Tariff Commission, was in March directed by President Wilson to proceed to Paris for the purpose of taking part in the readjustment of commercial treaties and similar problems.

Dr. H. C. Taylor, has resigned from the University of Wisconsin and has been appointed chief of the Office of Farm Management, United States Department of Agriculture, succeeding Dr. W. J. Spillman, who has become editor of the *Pennsylvania Farmer*.

Dr. Harry R. Tosdal has been promoted to full professorship and head of the department of economics and finance at the College of Business Administration of Boston University to succeed Professor Ralph B. Wilson.

Commissioner H. R. Trumbower, of the Wisconsin Railway Commission, is giving the course in public utilities at the University of Wisconsin in the absence of Mr. George Eberle.

Mr. W. L. Wanlass, who has been doing incidental teaching at The Johns Hopkins University, has been appointed to the chair of political economy in Union College, Schenectady, New York.

Professor Myron W. Watkins, of the University of Texas, will this summer hold a position with the Southwest National Bank of Commerce of Kansas City.

Professor M. S. Wildman has returned to Leland Stanford Jr. University after service with the Bureau of Planning and Statistics and later with the Price Section of the War Industries Board.

Professor Ralph B. Wilson has resigned his position at Boston University to enter the service of the Babson Statistical Organization.

Dr. Leo Wolman, of The Johns Hopkins University, is serving as one of the statistical experts assisting the American delegates to the Peace Conference.

Lieut. Elmer Wood has been appointed to teach accounting and corporation finance during the spring and summer terms at the University of Missouri.

Professor Isaac A. Loos, died March 24, 1919. For thirty years Professor Loos was head of the department of political economy and sociology in the State University of Iowa. He was author of *Studies in the Politics of Aristotle and Plato* and a contributor to the journals of sociology, political science, and economics.

Sir Robert Harry Inglis Palgrave died January 25, 1919, at the advanced age of ninety-two. Among his contributions in the field of economics was a study published in 1903 on *Bank Rate and Money Market in England, France, Germany, Holland, and Belgium,* also the *Dictionary of Political Economy,* the final volume of which was published in 1908.

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Report

of the

Committee on War Finance

of the

American Economic Association

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CONTENTS

REPORT OF THE COMMITTEE ON WAR FINANCE

The committee on war finance was constituted in the spring of 1918. It consisted of the following members:

H. C. ADAMS, University of Michigan.
C. J. BULLOCK, Harvard University.
F. R. FAIRCHILD, Yale University.
H. B. GARDNER, Brown University.
J. H. HOLLANDER, Johns Hopkins University.
E. W. KEMMERER, Princeton University.
A. D. NOYES, The New York Evening Post.
C. C. PLEHN, University of California.
W. A. SCOTT, University of Wisconsin.
O. M. W. SPRAGUE, Harvard University.
H. PARKER WILLIS, Columbia University.
E. R. A. SELIGMAN, Columbia University, *Chairman.*

Professor Sprague was unable, because of the stress of governmental work, to attend any of the meetings and resigned shortly after the formation of the committee. He was replaced by Professor R. M. Haig, of Columbia University. Professor Adams attended the first meeting of the committee but found it impossible to devote any time to its deliberations and therefore resigned. He was replaced by Professor E. L. Bogart, of the University of Illinois. Professor Scott was unable to attend any of the meetings of the committee, but has approved of the findings. Professor Plehn was also unable to attend the meetings, but participated in the work of several sub-committees.

At its constituent meeting, the committee decided to limit its activities to a consideration of public revenues, public credit and the currency problem, so far as the fiscal necessities of the government were concerned. It was recognized that the topic of governmental expenditure was at the time too vast to lend itself to a satisfactory treatment by the committee; and it was also felt that the time was inopportune for an immediate study of the budget. The committee therefore resolved itself into five subcommittees. To one of them was assigned the subject of government credit, to another the fiscal aspects of bank credit and

currency. The question of revenue from taxation appeared to be so important that three sub-committees were assigned to this topic; one to consider the income and excess-profits taxes; another to study the practicability of taxes on land and capital; and a third to deal with taxes on consumption and the other indirect taxes. The chairmen of the five sub-committees were as follows:

Income and excess-profits taxes	Professor Bullock
Consumption and other indirect taxes	Professor Gardner
Land and capital taxes	Professor Fairchild
Public credit	Professor Bogart
Fiscal aspects of credit and currency	Professor Kemmerer

All of the members of the general committee, with the exceptions noted above, served on one or more of the sub-committees.

It was soon apparent that any adequate study of the operation of the income and excess-profits taxes would call for a far more elaborate machinery of investigation than would be possible for the individual members of the sub-committee. A number of members and friends of the Association were prevailed upon to provide the funds for these more elaborate investigations and a sum of between twenty-five and thirty thousand dollars was raised for this purpose. During the summer an extensive series of returns from various classes of business concerns were secured by a carefully selected field force and were arranged and analyzed by an office force under the direction of Professor Bullock. The report of the committee is largely based upon the conclusions of this field investigation, while in all the legal questions involved the committee has enjoyed the active co-operation and advice of Mr. Clement R. Lamson, of Boston, and of Mr. George E. Holmes, of New York. It had also been arranged to send a special commission to Europe to study the workings of the excess-profits taxes in Great Britain and in France, but various difficulties connected with the securing of passports finally resulted in the abandonment of this project. While it would have been desirable to have a similar extensive basis for the work of the other sub-committees, this proved to be impracticable.

The original objects which the committee set itself to achieve were two in number, scientific and patriotic. The primary object of the committee, as representatives of a scientific Association, was to make a critical study of what had happened and what was happening in order that the results of such an investigation might become a permanent part of the scientific treatment of the subject

and might help to elucidate the validity of the general principles underlying the actual development. No less important, however, in the minds of the committee, was the patriotic aim;—the hope, namely, of being able through an analysis of what was happening to formulate some constructive suggestions as to what ought to be done in the future and thus to help in the creation of those conditions which might be of influence in winning the war.

The dramatic changes in the situation which supervened in November, when the draft report of the committee was virtually completed, necessarily affected the character of the final report. The first of our objects, namely, that of the scientific presentation and critical estimate of the actual fiscal events remains, indeed, unaltered; and this still forms the chief content of the present report. But now that the armistice has been arranged and the end of the war is in sight, the problem, so far as the future is concerned, becomes in large part one of readjustment or transition finance—a finance, namely, that is desirable during the period of transition from war conditions to peace conditions, from an abnormal to a normal situation. While your committee is of the opinion that the subject of normal or peace finance is beyond its purview, it believes that the problems of the finances of transition or readjustment properly fall within the scope of its activities, since the transition period is a direct consequence of the war activities. A study of war finance ought in other words to include a study of those conditions directly attributable to the war.

We have consequently included in our report some suggestions as to what is desirable during the post-war or transition period. In doing this, however, we have limited ourselves to the more important points and have left a fuller consideration of this subject, as well as of the future peace finance, for later study by a subsequent committee, if the Association should think it advisable to pursue the matter further.

We proceed, therefore, to discuss the general subject under five heads, corresponding to the five sub-committees. While the discussion of each topic is primarily the work of the chairman of the sub-committee, it is to be noted not only that the members of each sub-committee collaborated in the preparation, but also that each contribution has been considered and revised by the committee as a whole.

I

THE FEDERAL INCOME AND EXCESS-PROFITS TAXES

One of the most important features of American financial policy during the present war has been the very large reliance placed upon income and excess-profits taxes. For the fiscal year 1918 the receipts from these sources were approximately $2,840,000,000, which was over 73 per cent of the total income derived from taxation. From the fiscal point of view, at least, the income and excess-profits taxes were conspicuously successful in 1918; and it is evident that they were the mainstay of our war finances.

The reasons for the preponderant resort to these taxes are both clear and familiar. In the spring of 1917 there developed a strong popular demand that the war should be financed, as largely as practicable, by taxation and with the least possible resort to loans. It also proved that the kind of taxation generally favored was direct taxation of incomes and business profits, and that indirect taxation found little popular support. Further discussion of this subject is unnecessary for the purpose of this report and may well be postponed until after the war. It is sufficient at this time merely to point out that both political and other conditions made it natural and almost inevitable for Congress to minimize indirect taxation and resort chiefly to direct taxes upon incomes and business profits.

1. The Income Tax

The War Revenue Act of October 3, 1917, provided for an income tax of exceedingly complicated structure. Upon an ordinary income tax consisting of a normal tax of two per cent and a super-tax with progressive rates ranging from one to thirteen per cent on incomes in excess of $20,000, it superimposed a war income tax consisting of a normal tax of two per cent and a super-tax with progressive rates ranging from one to fifty per cent on incomes in excess of $5,000. Moreover, the exemptions granted to small incomes under the war tax differed materially

from those allowed under the ordinary income tax. The result was a complicated law which required the taxpayer to fill out a difficult return and increased considerably the trouble and expense of complying with the act. Simplification of structure is urgently needed, and it is gratifying that the revenue bill pending in Congress at the time this report is written proposes to simplify the tax by doing away with the cumbersome distinction between ordinary and war income taxes and levying but one normal tax and one super-tax.

An important feature of the Act of 1917 was that it reduced the exemptions granted under the normal income tax. There may have been, and probably were, in 1913, valid reasons for fixing the exemptions at $3,000 and $4,000, for unmarried and for married persons, respectively. But these exemptions were higher than could be justified after the income tax had surmounted the initial administrative difficulties and had come into fairly successful operation. The structure of the normal income tax, therefore, was materially improved when the exemptions allowed under the war tax were reduced to $1,000 and $2,000 respectively; and the pending revenue bill wisely places the exemptions at the same figure. When the war ends, it is important that these exemptions should not be materially increased since it is undesirable that, under either an income or a property tax, the duty of contributing to the support of government should be enforced upon only a small fraction of the population.

The rates of two and four per cent, imposed by the normal tax under the Act of 1917,[1] were moderate for a time of war, and the pending bill proposes to establish a normal rate of twelve per cent with a provision by which the rate upon the first $4,000 of taxable income shall be six per cent. These rates are not unreasonably high under the circumstances, but it is unfortunate that the structure of the normal tax should be complicated by the imposition of two rates. If the desire to make a market for Liberty bonds, or some other controlling consideration, made it advisable to bring the rate of the individual tax up to twelve per cent without, however, imposing the full rate upon smaller individual incomes, the provisions of the law can be readily understood. But it is to be hoped that, as soon

[1] The corporation income tax imposed a rate of six per cent upon net incomes of corporations, and also a tax of ten per cent upon undistributed net income not retained for the reasonable requirements of the business.

as practicable, Congress will establish a single rate for the normal income tax and differentiate between smaller and larger incomes only in connection with the super-tax.

The rates imposed by the super-tax reached very high figures under the Act of 1917, rising to sixty-three per cent upon increments of income in excess of $5,000,000. Their severity was tempered, however, by the extensive exemptions granted to incomes derived from federal, state and municipal obligations. The net result has been a progressive tax, the amount of which has depended not wholly upon the size of an individual's income, but to a considerable extent upon the character of his investments. Assuming that a progressive tax upon large incomes is just, it is clear that the rates imposed should depend upon the size of an individual's income; and results both farcical and inconsistent with the theory of progression ensue when rates vary with the kind of investments which a taxpayer has already made or may hereafter elect to make.

The rates levied upon larger incomes are so high as to cause serious hardship in certain cases, the more so since they are in addition to the very heavy rates imposed by the excess-profits tax.[1] Where the returns in any line of business fluctuate greatly from year to year, a tax of fifty per cent levied upon income realized in good years may, if continued in operation, consume all the profit derived from operations extending over a series of years. If an excess-profits tax takes half the net income from a business and the income tax takes half of the remaining income, not a few taxpayers will face certain ruin if the laws are strictly enforced. The same thing will occur when extensive commitments, financed with borrowed money, have been made prior to 1917 under arrangements by which the greater part of the prospective profits was expected to be used for extinguishing debts and otherwise reducing the commitments. When it is a matter of developing natural resources, taxes of such an amount obviously destroy all pecuniary inducement and may lead to a decision to postpone development until after the war. Cases have come to our attention which illustrate all these points, but it is manifestly difficult for an unofficial body to secure detailed information concerning them or to determine how frequently they

[1] In computing net income subject to the income tax, the amount of the excess profits tax may be deducted. This provision has reduced the number of hard cases, but has not prevented them from arising.

have occurred or how important they are in the aggregate. One taxpayer having large commitments in 1917, has been obliged, at great loss, to dispose of certain properties in order to save the remainder, and this at a time when his total profits were larger than ever before. Another who, during several years prior to 1917, had invested considerable capital in the development of mineral enterprises, "cleaned up" a profit of several million dollars early in 1917. Not knowing what revenue legislation Congress was to enact in the fall of that year, he reinvested a large part of his profits in other mineral properties which he expected to develop; and then found himself, at the opening of 1918, without any considerable amount of ready money but with a prospective tax bill calling for several millions. He had the option of selling his new properties at a forced sale entailing heavy losses, in order to pay a tax upon profits which in great part would be lost by the forced sale, or of throwing himself upon the mercy of the government which would be obliged either to ruin him or to disregard the plain provisions of the law. In another case taxable profits, which at the end of 1917 were represented largely by a swollen inventory based upon inflated prices, were lost in the first half of 1918 by a decline in the value of the inventory. The law of 1917 provided no legal method of dealing with such cases, and the new revenue act should certainly supply one. With the present heavy rates of taxation it is clearly necessary to confer upon the Treasury department wide discretionary powers. Such discretionary administration of tax laws would in ordinary times be undesirable, but at present it appears to be a necessity. The very need of granting such powers throws an interesting light upon the whole question of the taxation of war incomes and profits.

The income-tax laws successively enacted since 1913 have steadily improved the definition of taxable income, which, as formulated in the original law, left much to be desired. Further improvements seem likely to be made by the pending bill which, however, has not yet reached its final form. The points at which improvement is possible and desirable are as follows:

1. Taxpayers should be permitted to deduct losses sustained in any transaction entered into for profit, even though such transaction is not connected with any trade or business. Hitherto people have been taxed on gains resulting from such transactions but have been refused full allowance for losses.

2. The arbitrary limitation hitherto imposed upon corporations in respect to deductions allowed for interest paid on indebtedness ought to be removed. In the corporation income tax of 1909 there was justification for some such limitation, because there was then no personal income tax which would reach bondholders and, without some limitation, corporations could have reduced their taxes greatly by financing future requirements through the issue of bonds. When, however, the individual income tax was established in 1913, the justification for limiting a corporation's interest deduction disappeared because thereafter a tax would be levied upon the income from bonds or other corporate obligations.

3. A problem not yet solved is that of debt deduction allowed to individuals and corporations deriving income from non-taxable securities. Until 1917 individual taxpayers could deduct all interest paid upon their indebtedness, even though the money borrowed was invested in securities the income from which was exempt from taxation. Realizing what opportunities the unrestricted interest deduction offered for the avoidance of taxation, the Act of 1917 provided that individuals should not be allowed to deduct interest paid on indebtedness incurred for the purchase of tax-exempt obligations or securities. This limitation is obviously only partially effective on account of the difficulty of determining whether particular loans are for the purpose of making taxable or non-taxable investments. The revenue bill reported to the House of Representatives limited the interest deduction allowed to both individuals and corporations to the amount by which the interest paid on indebtedness exceeded the interest derived from non-taxable securities. But this provision was subsequently removed; and, even if it had been retained, it would not have met the requirements of the case. Yet it seems clear that a real problem exists, and that some day a satisfactory solution must be found, since taxpayers ought not to be able to reduce the amount of their income taxes by purchasing non-taxable securities with borrowed money. We face here one of the many undesirable results of creating large and increasingly important classes of tax-exempt securities. The best course would undoubtedly be to reverse, so far as practicable, our entire policy in the matter of exemptions. Until this is done, however, the only remedy likely to prove reasonably satisfactory is to limit interest deduction of an individual or a corporation to an amount which shall bear the same proportion to the total interest

paid upon indebtedness which the income derived from taxable sources bears to his total income from all sources. This would mean that a person deriving one-half of his income from non-taxable investments would be allowed to deduct one-half the interest he pays upon all his indebtedness—a solution which would be as nearly fair to both taxpayers and the government as the circumstances of the case permit.

4. The proceeds of life-insurance policies paid to the estate of a decedent should be excluded from the definition of taxable income in order to avoid the present flagrant discrimination between policies payable directly to beneficiaries and those payable to a decedent's estate. This the pending revenue bill proposes to do.

5. The heavy rates now levied on incomes and excess profits make it desirable to provide adequately for amortization of plants and equipment acquired since the outbreak of the war for the expansion of essential industries. Scarcely less necessary, also, is provision for losses occasioned by shrinkage in the value of inventories after the war. Unless these things are done great hardship may arise in lines of industry which have difficulty in readjusting themselves to peace conditions. Even in 1918 cases arose where profits made in 1917 were lost through the subsequent shrinkage of inventories, and we shall be fortunate if we avoid a large number of such cases in 1919. The pending bill proposes to grant certain allowances for amortization of plant or equipment and for losses realized in 1919 through shrinkage of inventory values used in computing the tax of the year 1918. Unless our war taxes are to be levied upon estimated income that will never be realized, Congress should make liberal provision for shrinkage in the value of plants and inventories.

6. Since 1913 corporations have been subject to double taxation of dividends received from the stocks of other taxable corporations. This was possible, although unjustifiable, when the rate of the income tax was only one or two per cent; but in 1917, when the rate imposed upon corporations was increased to six per cent, provision was made by which dividends derived from the stock of other taxable corporations would be doubly taxed only at the rate of two per cent. The pending bill proposes to do an act of simple justice by permitting corporations to deduct from their taxable income the whole amount of such dividends.

Whether the federal income tax should differentiate between

funded and unfunded incomes is a question which has been much discussed since last spring. Under the circumstances it is perhaps just as well that the pending bill does not undertake such differentiation. The administrative difficulties involved would be very great and the Treasury department now has more work on its hands than can be performed in a thoroughly satisfactory manner. Whether, when normal conditions return, the income tax should differentiate between funded and unfunded incomes is a question upon which it is best to reserve decision.

Certain administrative changes which have long been needed are incorporated in the pending bill. One of these is the provision by which individual taxpayers are granted the privilege of accounting upon the basis of fiscal, rather than calendar, years. Another is the establishment of a reasonable and practicable method by which taxpayers may secure refunds of taxes paid in excess of the amounts actually due the government. The existing arrangements are unbusinesslike, vexatious and discreditable to the United States. The process of securing refunds is so slow, uncertain, and expensive that it is not worth while to attempt to secure the return of small sums; while in all cases the loss of interest is involved. If, in order to avoid such delay and loss, a citizen protests the payment of a tax, he encounters various technical difficulties and incurs risk of serious penalties. Another step in advance is the provision by which it is proposed to place a limit of five years upon the time within which the government may institute proceedings for the collection of an income tax. At present it is impossible for any taxpayer to be sure that his best efforts have enabled him to ascertain and pay the amount of income tax due in any year since 1913, while corporations have no certainty that they have settled their taxes for the year 1910. Our income-tax laws have been badly drafted and very obscure at many points, local revenue officers have often given conflicting opinions, the Treasury department has frequently reversed its rulings, and retroactive investigations under changed rulings have resulted in demands for additional taxes on account of former years. In this respect the United States income tax has been exceedingly uncertain and vexatious, and it is undoubtedly time for a statute of limitations. The proposed limit of five years is probably too long, at least for normal times; except in case of fraud, the limit should ultimately be reduced to two or three years.

The high rates now levied upon incomes subject to the super-tax have greatly intensified an inequality which had existed since 1913 but was comparatively unimportant prior to the present year. Individual proprietors and members of a partnership are required to account to the government each year for the whole amount of the income resulting from the conduct of a business enterprise, and in respect of such income are subject to the super-tax if their total incomes exceed the stated figure. Upon the other hand the profits of a corporation become subject to the super-tax only to the extent that they are actually distributed to stockholders, so that the undistributed earnings are liable only to the normal income tax. The Act of 1917 sought to reach the difficulty by imposing a special tax of ten per cent upon corporation profits accumulated beyond the reasonable requirements of the business; but it exempted any part of such undistributed profits that was invested in certain obligations of the United States. Since any corporation that was expanding its operations and therefore required additional capital, as well as any that had debts which could be paid or available funds that could be invested in government obligations, could not be required to pay the tax, it proved that this provision of the Act of 1917 was of little effect. The Ways and Means committee, therefore, proposed to incorporate in the pending bill a provision imposing an additional tax of six per cent upon all undistributed corporation income except such as might be devoted to the discharge of bonds or other interest-bearing obligations outstanding at the opening of the taxable year. But the proposed remedy was open to so many objections that it was subsequently eliminated. It would have penalized companies which, when borrowing money, had obligated themselves to maintain a stated proportion between the amount of their liquid assets and the amount of their outstanding obligations, as well as those which, for good and sufficient reasons, had agreed to pay no dividends upon the common stock until their debts had been wholly extinguished or certain other conditions had been fulfilled. During 1918, moreover, not a few concerns were obliged to increase their loans in order to pay their war taxes, and in many such cases banks had required them to reduce or to suspend dividends. The difficulty is deep-seated since it arises from a natural and inevitable difference between the methods by which incorporated companies carry on business and those followed by unincorporated concerns.

It might be possible to allow the latter to set up reserves for various purposes, in respect of which the individual proprietors or partners should not be liable for assessment under the super-tax; but such a provision would present many administrative difficulties and would probably be found impracticable. Under an income tax, there seems to be no remedy that is not as bad as the disease, or even worse; and it is probable that we here face one of those unavoidable limitations to which this tax, like any other, is subject.[1]

The unusual conditions resulting from the war and the prevailing high rates of the income and excess-profits taxes have given rise to difficult problems in connection with gains realized from the sale of capital assets or from the receipt of insurance money greatly exceeding the value at which such assets had been carried upon a taxpayer's books. The most striking instances have arisen in connection with the purchase of ships by the government or the receipt of insurance money for vessels lost at sea. At the current high values easily realized for this kind of assets, certain companies have received purchase or insurance money enormously in excess of the depreciated value at which well managed concerns would carry their ships. Under previous rulings, in themselves perfectly reasonable and proper for normal times, certain companies would have been required to pay income and excess-profits taxes that would have had the effect of practically confiscating part of their fleets, since they would be left with funds insufficient to replace the vessels sold or lost at sea. It is understood that the Treasury has authorized the opening of suspense accounts which will be adjusted whenever the vessels are replaced, in such a manner as will prevent hardship from arising. This action is eminently just; but it is difficult to see how it was authorized by any provision of the existing law, and some legal arrangements should be provided for similar cases hereafter arising.

The high rate of the super-tax makes it necessary to change the existing method of taxing stock dividends. This was not of great importance prior to the Act of 1917, but it is now of vital consequence. Whether stock dividends should be treated

[1] The Senate Finance Committee has sought to find a remedy by exempting personal-service corporations from the excess-profits tax and by relieving corporations in general from the six per cent differential income tax provided in the House bill.

as taxable income is a question upon which opinions differ; but in any case the present method of taxing stock dividends is wrong. According to it, the value of each share of stock distributed is taken to be a proportionate part of the distributed surplus, and this results, in practically every case, in valuing a share at par. In some instances this rule greatly overvalues the gain accruing to stockholders from the increase in the number of shares which they hold, and it is desirable that some fairer method of determining the value should be devised and put into practical operation. Furthermore, the present method frequently results in double taxation. A person who buys a share of stock at 160, which figure reflects the enhanced earning power due to the accumulated surplus of the corporation, and then, some years later, receives an additional share of stock having a par value of $100, will be taxed upon $100 of income under the present method. Even if we assume that the new share of stock has a market value of $100, it is clear that such a stockholder has gained only $40 from the purchase of the original share at 160. Meanwhile the person from whom he purchased the original share has been required (assuming that he bought it at par which represented its value before the accumulation of the corporation's surplus) to return as taxable income the $60 of profit which he made when he sold his stock. Thus the government has taxed the two persons upon an assumed income of $160, when at the most there has been an increase of only $100 in the value of the investment. Until some better remedy is found, provision should be made that the taxable income resulting from a stock dividend should not exceed the difference between the value of the shares held by the stockholder after the declaration of a dividend and the price paid for his original shares of stock. Under such an arrangement, in the case above assumed, the person who purchased a share of stock at 160 and then received an additional share which made his total holdings worth $200 would be taxed upon an income of $40; while, of course, the original stockholder, who purchased at par the share which he sold at 160, would be taxed upon $60 of income.

The income tax of 1913 established an elaborate system of collection at source which, among other things, had the effect of throwing upon obligor corporations the payment of so much of the tax as fell upon interest on bonds issued under agreements by which the obligor covenanted to pay the interest free of any

tax which it might be required to deduct and to withhold at the source. The United States was never a party to any of these contracts and was not bound, morally or otherwise, to favor either of the contracting parties. It should have imposed the income tax upon the bondholder as a personal obligation in such a way as to oblige him, rather than the corporation, to pay it under the terms of the covenants, if that was the best fiscal and social policy; or it should have collected the tax at the source, with the result that, under the covenants, the corporations would have had to bear it, if that was the best policy to pursue. By deciding to collect the tax at the source Congress placed the burden upon the corporations and relieved the bondholders; but it inserted in the law of 1913 a provision which was probably intended to prevent future tax covenants from being made. This provision, however, did not prove effective, and later on it was repealed; so that the issue of so-called tax-exempt bonds has continued. In 1917 Congress abandoned the method of collecting the tax at the source except in the case of incomes of non-resident aliens and interest paid by corporations upon bonds issued with tax covenants. But the Act of 1917 did not require the whole of the normal tax to be withheld and deducted at the source, for it provided that only two per cent of the tax should be withheld and deducted and that the remaining two per cent should be assessed upon bondholders as a personal obligation. The bill now pending in Congress provides in a similar manner that the amount collected at the source shall be only two per cent and that the rest of the normal tax shall be collected from bondholders. If the whole of the normal tax were to be collected at the source, further issues of tax-exempt bonds could not be made, because few corporations, if any, would care to assume such a burden. The adjustment reached in 1917 and retained by the pending bill permits continued issues of such bonds, and raises the important question of the desirability of permitting an income tax to be made the subject of such contracts.

Up to the present time interest upon state and municipal obligations has been exempt from the federal income tax. From every point of view such exemption is highly objectionable. In the first place it provides a perfectly legal method by which taxpayers may avoid the federal income tax. In the second place it makes the rate imposed under the super-tax depend upon the character of a taxpayer's investments, and not upon the total amount of his income, an arrangement which is directly opposed

to the theory of progressive taxation and in practice tends to make progression inequitable in its results. In the third place it puts state and municipal credit upon an essentially artificial basis; and, when the present restriction upon state and municipal issues comes to an end, will place a high premium upon improvident borrowing. A constitutional question is undoubtedly involved; but this should be adjudicated now, and should not be permitted to continue indefinitely as an argument against action which ought to be taken with the least possible delay. The sixteenth amendment to the federal constitution seems to authorize Congress to tax incomes from whatever sources derived, and language used by the court in cases not directly involving this question should not prevent Congress from putting to a test the broad authority conferred upon it by the amendment. Whether a tax should be imposed upon all outstanding issues, or should be confined to future issues of state and municipal obligations, is a question upon which opinions differ; but difficulty at this point can be avoided by confining the tax to future issues. The bill reported by the Ways and Means committee very wisely provided that the income tax should be imposed upon future issues of state and municipal obligations, but this provision unfortunately has been stricken from the pending bill. It is to be hoped that before final action is taken the views of the Ways and Means committee will prevail.

2. *The Excess-Profits Tax*

As already observed, the excess-profits tax imposed by the Act of 1917 proved a great fiscal success. At a time when revenue was a paramount consideration, this result is greatly to the credit of the tax and, considered in a broad way, is ample justification of its enactment. When this is said, however, praise must end and criticism begin; for it appears certain that the success of the tax was due not so much to the manner in which the law was drawn, as to the skill and good judgment of the Internal Revenue department in administering the act and to the loyalty of the taxpayers in complying as best they could with the crude, obscure and, in many ways, harsh and unequal revenue measure.

The law undertook to levy a tax on profits in excess of a stated deduction, and to levy it at rates varying with the percentage which the taxable income bore to the invested capital. The result in certain important respects was the reverse of what Congress

probably intended. The Secretary of the Treasury has published statistics which show that the tax collected from individual contributors bore no necessary relation to war profits and imposed much heavier rates upon small than upon large concerns,[1] yet both of these results were exactly what might have been expected. The rate of profits varies greatly in different branches of industry and cannot have a direct relation to the extent to which different lines have profited as a result of the war. It should also have been evident to the framers of the Act that very large concerns seldom or never realize such high percentages of profits as successful concerns of a moderate or small size. These facts deserve to be recorded in this report, because they illustrate so strikingly the tendency of laws to operate in a manner more or less different from that which their makers intend.

In view of the results just mentioned the Treasury recommended that an alternative system be introduced by which two taxes should be computed, one upon the present excess-profits principle and the other upon the war-profits principle adopted by Great Britain, which bases the tax upon the excess of the profits realized in the taxable year above the average profits realized during a series of years prior to the war; with a provision that the higher of the two amounts thus determined should be the amount of the tax actually assessed. Such an arrangement would undoubtedly secure greater equality in the taxes levied upon different lines of industry; but whether it would materially affect the status of large and small concerns is not so clear.[2] It is evident that the proposed arrangement will greatly increase the complexity of the tax and the labor of administering it. That such a provision should be found necessary is striking evidence of the erratic workings of any tax levied upon business profits except by the method of a proportional levy upon the entire amount of such profits. The excess-profits tax of the present year gave erratic results in numerous cases, and a war-profits tax

[1] Statistics representing 7,899 corporations believed to make a representative showing indicate that the ratio of the net income to invested capital, and therefore the rate of tax imposed, was roughly in inverse proportion to the size of the company. *Cf. Hearings before the Committee on Ways and Means of the House of Representatives*, August 14, 1918, p. 2040.

[2] That this is the view of the framers of the pending bill may, perhaps, be inferred from the fact that the bill, at the time of writing, fixes a maximum limit for the amount of the tax that shall be imposed upon concerns having an invested capital of $50,000 or less.

upon the British model would have had the same result. The proposed combination of the two methods will not eliminate such results in cases where the application of either method leads to an excessively high tax, but will eliminate them in cases where the use of a single method would result in an unduly low rate of taxation. The net result may be a reduction in the number of erratic cases, but the proposed combination of methods will complicate the law and increase the cost of administration. If Congress continues to tax business profits, it should discard the cumbersome and complicated paraphernalia of the present law and levy a simple tax upon the net income derived from business enterprise.

The most difficult and in many ways the most important provision of the existing excess-profits tax is that which provides for the determination of invested capital. The intention of the Act of 1917 was that invested capital should include all the capital put into a business by the proprietors, including earnings accumulated prior to the taxable year as well as the original investment; on the other hand, appreciation of capital assets was to be excluded. The law also provided that the amount determined should be the average monthly investment. This seems simple, but in practice the determination of an actual monthly average was difficult in many cases and impossible in some instances. Where, however, the value of the various items of invested capital was readily ascertainable, there was probably no difficulty in arriving at a figure roughly approximating the amount continuously employed throughout the year.

In elaborating the definition of invested capital, and still more in administering the law, many difficulties were encountered:

1. In the first place it was necessary for the Act to provide that, in general, capital invested in non-taxable securities should not be considered invested capital, because the income from such securities was not taxed.[1] This provision was reasonable in most cases, but was obviously inapplicable to concerns that made a business of dealing in non-taxable securities such as state and municipal bonds. The injustice of taxing such concerns upon profits derived from the purchase and sale of non-taxables while excluding the securities from the definition of invested capital,

[1] For obvious reasons obligations of the United States were exempted from this rule and were allowed to be included with the invested capital.

led the Treasury department to make a ruling, apparently contrary to the provisions of the law, that, whenever income consists partly of taxable gains or profits arising from trading in non-taxable securities, such securities may be included in the invested capital up to an amount bearing the same ratio to the total investment in non-taxable securities as the amount of the trading profits bears to the total income. It is interesting to note that the report of the Ways and Means committee introducing the pending war-revenue bill declares that the law of 1917 "specifically states" that non-taxable securities shall be excluded from non-taxable income, and that, therefore, difficulty arises in the taxation of "certain investment banking houses whose business is almost entirely confined to tax-exempt securities." The pending bill, therefore, provides that in cases where the income from inadmissible assets consists in part of profit derived from the sale thereof, a corresponding part of the capital invested in such assets shall be included in the invested capital.

2. In the next place it was necessary to determine what should be done with borrowed capital, and the law provided that invested capital should not include "money or other property borrowed" This express provision of the law had also to be disregarded in certain cases. In ascertaining their taxable income corporations were not allowed to deduct interest paid on indebtedness in excess of an amount equal to their paid-up capital stock plus one-half of their interest-bearing indebtedness. This arbitrary limitation created taxable income considerably in excess of the true net income of many corporations; and if such companies had been denied the right to include in their invested capital at least the part of their indebtedness in respect of which they were denied a deduction for interest, many intolerable situations would have arisen. The Treasury cut the knot by ruling that a corporation which, under the income tax, was not allowed to deduct the entire interest paid upon its debts, might include in its invested capital a proportion of its permanent indebtedness corresponding to the proportion of the interest payments which it was not allowed to deduct. This ruling, while perhaps not authorized by the law, provided a remedy for many hardships that would have arisen if the act had been literally enforced. But it also had another result. The reason for determining invested capital was to establish the amount of the deduction of seven, eight or nine per cent, which was allowed under the excess-profits tax. If the arbitrary

limitation upon interest increased a concern's taxable income by the amount of $50,000, which we may assume to represent the interest paid on one million dollars of permanent indebtedness in excess of the limitation, the permission to include this million dollars in the invested capital entitled the concern to a deduction of from $70,000 to $90,000; so that it was better off than if it had been allowed to deduct the whole of the interest paid upon indebtedness. The pending bill removes the arbitrary limitation upon a corporation's interest deduction and will, therefore, obviate the difficulty encountered in this connection under the Act of 1917. It will also have the effect of increasing the taxes paid by a certain number of corporations.[1]

3. In the third place difficulty was encountered in cases where corporations had issued stock for the purchase of tangible property. The law provided that in such instances the amount of the investment should be taken to be the cash value of the tangible property at the time of payment, unless such payment was made prior to January 1, 1914, in which case the investment should be taken to be the cash value of the tangible property on that date. It further prescribed that, in no case, should such investment exceed the par value of the shares specifically issued in payment for tangible property. This has produced no little inequality. If a corporation, at some date prior to January 1, 1914, issued stock to the amount of one million dollars for real estate worth at that time not more than half a million, and if such real estate subsequently appreciated so that on January 1, 1914, it was worth one million, the company was entitled to be credited with one million of invested capital. But if another corporation upon the same date prior to January 1, 1914, purchased real estate worth half a million, by issuing half a million of capital stock, it could be credited with only half a million of invested capital even though by January 1, 1914, this real estate had appreciated until it was worth a million. The pending bill removes this inequality, but it does so by striking out the provision that property purchased prior to January 1, 1914, shall be valued

[1] In this connection it should be noted that the form of return prescribed by the Treasury department and a ruling contained in a letter dated May 17, 1918, allowed so-called inadmissible assets to be offset by indebtedness, with the result that the deduction made from admissible assets on account of borrowed capital was reduced by the amount of indebtedness offset against the inadmissible assets. This interpretation doubtless relieved numerous cases of genuine hardship, but it is doubtful whether it was authorized by the law.

as of that date. This means that all tangible property purchased by the issue of stock will be valued as of the date of payment, with the proviso that the value shall not exceed the par value of such issued stock. The result will be that a conservative concern which has issued stock in exchange for property taken over from members of the company at less than the true market value will fail to secure credit for part of the capital actually invested by stockholders.

4. A fourth difficulty arose in connection with the valuation of good will, sometimes a dubious and sometimes a solid and valuable asset. The law provided that good will, trade marks and brands, and franchises and other similar assets should be included as invested capital if they were paid for specifically in cash or by tangible property; but that, if they were purchased by the issue of shares in the capital stock of corporations, or by shares in a partnership, prior to March 3, 1917, they should be valued at not more than the actual cash value at the time of purchase. Further provisos limited the valuation to the par value of the stock issued by a corporation for such a purpose, and imposed the limitation that the valuation should not exceed twenty per cent of the total capital stock of a corporation or the total capital of a partnership. The result was that, in cases where good will and similar assets had been purchased for cash or tangible property, they could be counted as invested capital up to their full value; but that, where identically similar and equally valuable assets had been purchased by the issue of shares of capital stock or by shares in a partnership enterprise, they must come under arbitrary limitations which would frequently result in a valuation much below the actual market value. Finally, in cases where good will and other similar assets had been gradually acquired by the activity and enterprise of a business concern, and had not been purchased, they were not allowed to be counted at all; although other concerns which had acquired similar assets by purchase, perhaps as the result of a reorganization carried through prior to March 3, 1917, could secure a substantial allowance. This has resulted in serious inequalities in certain cases. It has developed that concerns in the same branch of trade have been subjected to discriminating treatment which goes far to destroy the competitive conditions formerly existing. In one case where the competition is intense and the taxes are very heavy we have found that the inequality resulting from such discrimination

made a difference of thirty per cent in the amount of taxes paid. With a light tax the difficulty might not be serious; but with one that may amount to thirty, forty or fifty per cent the discrimination is too grievous to be easily borne.

5. Another cause of inequality was the provision made for patents and copyrights. If purchased for cash these could be treated as invested capital; but if purchased by the issue of capital stock or by shares in a partnership they could not be valued at more than the par value of such stock or the amount of such shares in the partnership. This has meant that patents or copyrights of equal value have counted for much or little in determining a concern's invested capital according to the practice followed in valuing such assets. In cases where valuable patents and copyrights have been turned in by members of a concern for little or no consideration in accordance with a policy of extreme conservatism, the excess-profits tax has penalized conservative methods of business management.[1] The pending bill proposes to limit the valuation of patents to twenty per cent of a concern's capital.

In determining the amount of taxable income certain difficulties were bound to arise under a tax as heavy as the excess-profits tax. The law provided that the income subject to the tax should be determined in the same manner as that subject to the income tax,[2] except that corporations might deduct income received from dividends upon the stock of other taxable corporations. In the administration of the law the following problems arose:

1. The income tax limited the deduction on account of salaries to the amounts *actually paid* in 1917, a provision which occasioned no difficulty under the income tax but would have resulted in great hardship and inequality under the excess-profits tax in cases where the proprietors of business concerns had never been

[1] One result of the excess-profits tax has been that not a few concerns have "written up" patents and other similar assets which, under conservative methods of accounting, they had previously carried at nominal valuations. This had to be done, of course, under the limitations imposed by the law; but the statistics which we have collected show a substantial increase in the figures at which some companies are now carrying their good will, patents, copyrights, and trade marks or brands.

[2] It should be noted, however, that since the amount of the excess-profits tax could be deducted in determining the amount of income subject to the income tax, there was a further important difference in the bases of the two taxes.

accustomed to pay themselves stated salaries. In spite of the limitation imposed by the law the Treasury department ruled that such concerns might be allowed to deduct a reasonable amount for salaries even though such salaries had not been actually paid. This ruling prevented an immense amount of hardship from arising under the measure enacted by Congress.

2. Another difficulty arises in the case of business enterprises the profits of which fluctuate greatly from year to year. The law evidently intended that the entire income for 1917 in excess of the deduction should be taxed at the very high rates of the excess-profits tax and without regard to the inevitable fluctuations in lines of business where the profits of good years must in some part offset the losses of bad years. Neither did it provide for the fact that profits realized in 1917 might be the fruit of activities long antedating that year and requiring heavy advances yielding no returns during a series of prior years. For such cases the Treasury Department undertook to provide some remedy under the provisions of section 210 of the Act of 1917. This section apparently related to a very different matter. It provided that in any case where the Secretary of the Treasury might be unable "satisfactorily to determine the invested capital," the amount of the authorized deduction (seven, eight or nine per cent of the invested capital) should be determined with reference to the deduction granted to representative concerns engaged in a similar trade or business. Nothing in this section applied to cases where the invested capital could be satisfactorily determined. In its published regulations [1] the Treasury department, after enumerating various cases to which section 210 was clearly applicable, held that the section might be invoked in cases where "the invested capital is seriously disproportionate to the taxable income"; which cases might arise through "the realization in one year of the earnings of capital unproductively invested through a period of years or of the fruits of activities antedating the taxable year", as well as through inability to allow properly for "amortization, obsolescence, or exceptional depreciation" of war plants. Thus the section was made applicable to cases in which the invested capital could be determined not only with satisfactory, but with deadly accuracy,—a somewhat extraordinary result. From every practical point of view, however, the ruling was extremely fortunate because it enabled the de-

[1] Regulations No. 41, Article 52 (February 4, 1918).

partment to give relief in cases where the power to tax involved not only the "power to destroy" but the actual exercise of that power. It appears that under this interpretation of section 210 the department has reconstructed the capital of no inconsiderable number of concerns with a view to reducing to a reasonable figure the taxable income in excess of the authorized deduction. In fact, the language of the ruling indicates that it was considered proper, under section 210, to make an allowance for irregularity of earnings and for amortization, obsolescence or exceptional depreciation. It may be concluded, therefore, that the income subject to the excess-profit tax has been determined in a number of cases upon a different basis from that followed under the income tax law. Such action was undoubtedly necessary in order to avoid the most extreme hardship; but provision should have been made for it in the law either by re-defining income for the purpose of the excess-profits tax or by conferring upon the Treasury department broad discretionary power in administering the Act. This is a matter which has been already discussed in connection with the federal income tax.

The deduction allowed under the excess-profits tax was to be either seven, eight or nine per cent (according to the average amount of net income during the prewar period), plus a specific deduction of $3,000 in the case of a corporation or $6,000 in the case of an individual or partnership.[1] The justification of allowing corporations a smaller specific deduction is not obvious and has never been satisfactorily demonstrated. The rates of from seven to nine per cent[2] were sufficient to exempt an amount of income representing "a good, moderate, and reasonable profit" in some lines of industry, but they exempted very much less than that in many others. Generally speaking, in staple lines of industry the deduction was frequently equivalent to a normal profit, while in specialties it was very much less. The same thing is true of well-established industries as compared with those still

1 The further provision was made that, if the taxpayer had no income, or an abnormally low income, during the prewar period, the deduction should be determined with reference to that allowed representative concerns in a similar trade or business.

2 In not a few cases the difficulty of determining the rate of profit during the prewar period or that of determining the prewar capital led concerns to claim the minimum deduction of seven per cent purely on account of the difficulty or expense of determining the exact facts.

in the experimental stage, of industries involving a minimum of risk as compared with those which are attended with unusual hazards, and of industries in which profits are relatively stable as compared with those in which earnings fluctuate greatly from year to year. This is the cardinal defect of any tax levied upon the excess-profits principle; and at this point there can be no doubt that the war-profits principle followed by Great Britain gives a much fairer result. The British method, however, has the disadvantage of favoring concerns, or even entire lines of industry, which happened to be especially prosperous during the prewar period, and therefore does not necessarily give a better net result than the method followed by the United States. Whichever method a government may elect to follow will probably produce so many erratic results that the tax administrator will wish that the other had been adopted. A combination of the two methods, such as is now contemplated, may give better net results, but will complicate greatly the administration of the tax.

The rates imposed by the excess-profits tax ranged from twenty per cent of the amount of the net income in excess of the deduction but not exceeding fifteen per cent of the invested capital, up to sixty per cent upon increments of net income in excess of thirty-three per cent of such capital. Thus, ignoring the specific deduction which was negligible in the case of large concerns, a company earning fifteen per cent upon its invested capital and entitled to a deduction of eight per cent, paid a tax amounting to 1.4 per cent of its invested capital, or a trifle less than ten per cent of its net income; while a company earning fifty per cent paid a tax amounting to 18.2 per cent upon its invested capital, or 36.4 per cent of its net income; and a company earning one hundred per cent paid 48.2 per cent on its invested capital and the same percentage of its net income.

In regard to the specific exemption of $3,000 or $6,000 the section of the law prescribing the rates of taxation was so obscure that there was much difference of opinion concerning its application. It was clear that "net income in excess of the deduction" was to be the basis for determining the rate; but, if the allowance of seven, eight or nine per cent plus the specific deduction amounted to more than fifteen per cent of the taxpayer's invested capital, the law seemed to provide no way by which a taxpayer could get so much of the deduction as exceeded the figure of fifteen per cent. This was because the law clearly provided that

the whole " amount of the net income in excess of fifteen per centum and not in excess of twenty per centum " should be taxed at the rate of twenty-five per cent; and so on with the increments of income in excess of twenty per cent. The Treasury department, however, came to the relief of the small taxpayer with a ruling, apparently contrary to the provisions of section 201, by which it was held that any amount of the deduction in excess of fifteen per cent of the invested capital could be deducted from increments of net income in excess of fifteen per cent; which would obviously result in taxing such increments at less than their whole amount.

One of the unfortunate results of the Act of 1917 was the enormous disproportion between the tax imposed upon a concern having a nominal capital and that levied upon one having a capital slightly in excess of the amount which the Treasury department might hold to be nominal. The former concern was subject to a flat tax at the comparatively low rate of eight per cent, while the latter, if it was successful, might find itself subject to a tax of forty per cent or upwards because its invested capital was so small relatively to its earnings. Thus a decision by the department that a concern's capital exceeded a nominal amount might have the effect of increasing the tax rate from eight to forty per cent. At the time of writing the pending bill proposes a tax of twenty per cent upon concerns having a nominal capital. This will make the graduation of the tax rates less abrupt in a majority of cases, but will not wholly remove the difficulty.

A matter of no little interest is the definition which the Treasury department gave to the term " nominal capital ". Section 209 of the Act of 1917 provided that " a trade or business having no invested capital or not more than a nominal capital " should be taxed at the flat rate of eight per cent upon its net income in excess of $3,000 or $6,000, according as it happened to be incorporated or unincorporated.[1] The legislative history of the Act may indicate that its framers, or some of them, intended that this section should apply to lawyers, or other persons rendering personal services, whose capital is not a material factor in producing their income. But this is not the language of the Act which makes the definition turn wholly upon the amount of capital invested in a trade or business. A taxpayer having " no invested capital " might be one who does business wholly with borrowed

[1] Foreign corporations and non-resident aliens were not allowed this deduction.

money, just as clearly as he might be a lawyer or any other person engaged in rendering personal services. Again the words "not more than a nominal capital" turn wholly upon the amount of capital employed and have no reference to its being employed by a law firm, or any other concern rendering personal services, rather than by a concern engaged in commercial operations. Yet the Treasury department, in various rulings, has sought to read into section 209 an interpretation which would make it apply "primarily to occupations, professions, trades and businesses engaged principally in rendering personal services in which the employment of capital is not necessary and the earnings of which are to be ascribed primarily to the activities of the owners"; and has even ruled that "no weight will be given to the fact" that a business "is carried on by means of personal service unless the principal owners are regularly engaged in the active conduct of the trade or business". This ruling was followed by a series of remarkable letters which held, for instance, that, as long as the proprietor of a barber shop or vaudeville theatre renders personal services by wielding a razor or doing a turn upon the stage, he has only a nominal invested capital; and that if he becomes his own cashier or goes to work in the box office, he has more than a nominal capital. Section 303 of the pending bill re-writes this provision in a manner which eliminates the term "nominal capital" and imposes a flat tax of twenty per cent upon net income in excess of the stated deduction, derived from any business "the earnings of which are to be ascribed primarily to the activities of the principal owners" and in which capital (whether invested, borrowed, or rented) "is not directly or indirectly a material income-producing factor". This will eliminate certain commission houses, but, if the word "rented" is retained, may also eliminate law firms and other concerns rendering personal services, which occupy expensive "rented" offices.

A final matter is the great need of further simplification of both the income and the excess-profits tax, particularly the latter. The law relating to both is now in such shape that the ordinary citizen cannot understand it, and upon many of the difficult questions which arise cannot get very good advice from the average lawyer, accountant, or local internal revenue officials. The mere ascertainment of the data on which the computation of the tax depends frequently involves a large expenditure for clerical services, while the fees of accountants and lawyers swell the total cost borne by

the taxpayer to proportions which are often excessive.[1] Expenditures running from five to twenty-five thousand dollars, and representing between one and two per cent of the amount of taxes found to be due, are frequently necessary; and this means that the expense occasioned the taxpayer often equals or exceeds the average expense which the collection of the tax directly occasions to the government. In not a few cases it has cost taxpayers $700 or $800 to determine that their tax liability was between $1,000 and $2,000, and in some instances it has cost from $25 to $500 to determine that taxpayers had no taxable income.

3. The Income and Excess-Profits Taxes in their Relation to our Present Industrial Situation

From the fiscal point of view the federal income and excess-profits taxes have been conspicuously and even brilliantly successful. They have been attended, the latter to a much greater extent than the former, with many inequalities, and have resulted in no little hardship; but such difficult'es have been minimized at many points by the rulings of the Treasury department. The result has been arbitrary and discretionary taxation, very objectionable under ordinary conditions but justifiable as a war measure. Upon the whole the balance seems to turn greatly in favor of these extraordinarily heavy war taxes.

The industrial effects of the taxes remain to be considered. Concerning them it is probably too early to reach a final conclusion, and it is obvious that the somewhat abrupt termination of the war may make the results materially different from what they would have been if the war had continued through the year 1919. Fear was expressed that taxation might prove so heavy as to diminish the ability of our essential industries to respond to the great demands made upon them by the war, and some anxiety is now felt concerning the effects of continued heavy taxation upon the ability of business to readjust itself to the conditions following the restoration of peace. Manifestly, the latter question is the one of immediate practical importance.

[1] Of course, expenditures for accountants, lawyers, and additional clerical assistance are deductible business expenses, so that in the case of business concerns a part of the cost borne by the taxpayer in the first instance is thrown back upon the government. This does not mean, however, that the total cost of collecting the tax is any less, and does not affect the conclusion that this cost is frequently excessive.

The reason for existing apprehension is found in the conditions of war-time industry and particularly in the unsubstantial character of no small part of the so-called "war profits". In a period of great expansion, with its inevitable accompaniment of inflated values, almost every concern that increases its gross output or sales can show a large book profit at the end of the year; and it is upon this profit that income and excess-profits taxes are necessarily levied. But experience teaches that book profits realized during a period of great expansion are in many cases partly or largely offset by the losses which must be taken when expansion comes to an end and industry returns to a normal basis. This danger can be minimized only by liquidating liabilities, writing off new plant, and making provision for shrinkage in the value of inventories when prices find their peace level; all of which things are difficult or impossible if taxation absorbs too large a proportion of the profits. What is going to follow the termination of this war no one can predict with certainty, but men who are guided by experience rather than speculation naturally and very reasonably expect that contraction and deflation will sooner or later follow expansion and inflation.

In order to determine whether there is danger that Congress, in its praiseworthy desire to make the finances of the nation strong, has been and still is overdoing the taxation of profits, a careful examination has been made of the condition of several hundred business concerns during the period from 1914 to 1918. The data here presented relate to 402 concerns having in 1918 an aggregate capitalization of $6,114,000,000. Most of them are engaged in manufacturing, but a few carry on mercantile and miscellaneous kinds of business. Public-service corporations and banks or other financial institutions have not been included because the conditions under which they operate differ in so many important respects from those affecting manufacturing and mercantile concerns. Certain large holding companies, like the United States Steel Corporation, have also been excluded because it was impossible to secure data in a form admitting of such analysis as it was necessary to make. With these exclusions, it will be seen that the concerns studied provide a fair, and probably a sufficient, sample of the manufacturing industries of the United States. One point at which the data are unsatisfactory is that they do not include any considerable number of mercantile concerns. Further investigation may show that

the conclusions reached need to be qualified before they are applied to mercantile business, but this seems improbable. Another qualification is that the concerns studied are of fairly large size, their average capitalization being something over $15,000,000; and it is obviously possible that an investigation of a large number of smaller concerns would reveal conditions that are either more or less favorable than those shown by larger enterprises.[1] In about half of the cases data have been obtained from either Poor's or Moody's manuals. In the rest they have been secured by means of a questionnaire.

Since the most fundamental and interesting problem involved in the investigation is the nature of the profits realized by concerns which have expanded during a period of marked inflation, the enterprises have been divided into two groups hereafter called "expanded" and "not-expanded". These terms obviously need exact definition before they can be used for statistical purposes, and it has seemed best to define an expanded concern as one whose total assets and total liabilities have increased by more than twenty per cent during the period from 1914 to 1918. This is upon the assumption that in times like the present no concern can keep its product or its volume of sales up to the pre-war level without expanding to a certain extent, and that concerns whose total assets and total liabilities have not increased by at least twenty per cent have done no more than hold their own. It also assumes that companies which have increased materially their product or their volume of sales must have increased their total assets and total liabilities by more than twenty per cent. In the actual examination and classification of the data it appeared that, if these assumptions erred at all, they did so by understating the amount by which assets and liabilities have had to increase in order to maintain business on a pre-war level. It follows, therefore, that some of the concerns here classified as expanded may not have increased materially their physical output or their volume of sales. But it seemed best to adhere to the figure of twenty per cent in order to make sure that the statistics would not exaggerate the conditions found to exist in expanded industries.

[1] In this connection it may be stated that none of the concerns here studied made fabulous percentages of profit or suffered extreme hardship under the operation of the excess profits tax. It proved impossible to secure data concerning extreme cases, and the statistics, therefore, probably represent average rather than extreme conditions.

Turning to the companies which have not expanded, it appears somewhat surprising that so many (148 out of 402) fall in this class. When one considers what an enormous increase of industrial activity has occurred since 1914, it is not a little strange that approximately thirty-seven per cent of the companies have not increased their total assets and total liabilities by as much as twenty per cent. Of these not-expanded concerns a considerable number are smaller companies; 34 of them having an average capitalization of less than $3,000,000 in 1918, and 74 others having an average capitalization of about $13,000,000, which figures are to be compared with an average capitalization of over $15,000,000 for the entire number of 402 companies.

For the purpose of further analysis the not-expanded concerns have been divided into three classes which will hereafter be called Class A, Class B, and Class C. The first of these includes all the companies which were in a strong financial condition in 1918; the third includes all those whose financial condition in 1918 was just the opposite of that in which the concerns in Class A found themselves; while Class B includes all the remaining companies.

The statistics for the forty companies in Class A of the not-expanded concerns are as follows:

Assets (000 omitted)

	1914	*1918*
Plant account, etc.	$413,949	$400,196
Other tangible property	168,424	168,257
Receivables	130,402	119,787
Investments	78,521	117,802
Cash	35,220	95,986
Good will	18,464	17,984
Patents, etc.	29,715	30,449
All other assets	4,142	6,333
Total	$878,837	$956,794

Liabilities (000 omitted)

	1914	*1918*
Capital stock	$611,158	$608,884
Funded debts	59,922	44,402
Payables	69,085	39,492
Other obligations	13,078	21,674
Reserves for taxes	662	18,312
Profit and loss	124,932	224,030
Total	$878,837	$956,794

It will be observed that these concerns have increased their assets by less than ten per cent during the four years covered by our figures, but that they have reduced very greatly their indebtedness. Funded debt has been diminished by over 15 millions, payables have diminished by nearly 30 millions, while other obligations have increased by something over 8 millions. The items included under other obligations were not always easy to classify, and it is possible that in some instances certain things have been included which were not obligations in the ordinary sense of the word. But any errors that may have crept in at this point do not in all probability materially affect the aggregate figures for the forty companies.

Comparing the indebtedness with the quick assets, we find that in 1914 these concerns had 412 millions of "quick" (this is the total of the second, third, fourth, and fifth items in the table of assets), while they owed 142 millions (this is the total of the second, third and fourth items in the table of liabilities). By 1918, however, they had increased their quick assets to 502 millions while they had reduced their indebtedness to 105 millions.

Significant also is the change which had occurred in the composition of the assets. While the total had increased 78 millions, the plant account had been diminished by nearly 14 millions, the other tangible property (merchandise account) had slightly decreased, and the receivables had declined nearly 11 millions. Good will and patents had not changed materially, "other assets" had increased by slightly over 2 millions, and the only items which had increased materially were the investments and the cash. It will be noticed that investments exceeded by 12 millions the total of funded debt, payables, and other obligations; while the cash exceeded by 37 millions the total of the payables and the accrued taxes for which reserves had been set up. Meanwhile the capital stock had very slightly diminished, and the profit and loss account showed an increase of nearly 100 millions. Obviously these companies are prepared for any conditions that may arise; but, since they have not been expanding their business and have been converting their assets into liquid form, they have not helped as much as they might have done to provide the supplies and materials needed for the prosecution of the war. They obviously have not been injured by the federal income and excess-profits taxes, and they appear to have set their houses in order against any contingency that may arise when the war comes to an end.

With the 40 concerns in Class A it is interesting to compare the 34 concerns that fall in Class C. For these the statistics are as follows:

ASSETS (000 omitted)

	1914	1918
Plant account, etc.	$48,405	$41,834
Other tangible property	14,452	16,504
Receivables	18,761	13,767
Investments	4,874	4,618
Cash	2,280	1,682
Good will	10,195	10,266
Patents, etc.	200	140
All other assets	941	4,348
Total	$100,108	$93,159

LIABILITIES (000 omitted)

	1914	1918
Capital stock	$58,412	$56,308
Funded debt	10,870	12,221
Payables	12,289	12,100
Other obligations	818	3,646
Reserves for taxes	28	277
Profit and loss	17,691	8,607
Total	$100,108	$93,159

It is obvious that we are here dealing with a group of rather small concerns which are in lines of business injuriously affected by the war. In size they average less than $3,000,000, while the group of concerns in Class A averaged in 1918 nearly $24,000,000. Their total assets have decreased by 7 millions and their profit-and-loss accounts have shrunk by 9 millions. Evidently the European war has not brought wealth to everybody. The changes in the composition of the assets have not been favorable. Other tangible property (merchandise) has increased by two millions, while investments and cash, particularly the latter, have decreased. In addition to this, the funded debt, payables, and other obligations have increased by four millions. In 1914 the quick assets amounted to 40 millions and the total indebtedness to 24 millions; while by 1918 the "quick" had fallen to 36 millions, and the indebtedness had risen to 28 millions. As a class, these companies have not been burdened by income and excess-profits taxes because their incomes have shrunk and they do not seem to have had excess profits or, indeed, any other kind.

Less interest attaches to Class B of the not-expanded concerns.

Class A included only companies which met certain definite requirements and the same is true of Class C; while Class B includes a greater variety of companies, some of which had been prospering but were not able to qualify for admission to Class A, while others had not prospered but were not so badly off as to fall into Class C. The 74 concerns in Class B, therefore, exhibit much diversity of condition and the total figures are not especially significant. The totals are:

ASSETS (000 omitted)

	1914	*1918*
Plant account, etc	$385,329	$391,419
Other tangible property	157,376	224,079
Receivables	101,712	114,552
Investments	62,847	63,331
Cash	23,018	33,570
Good will	118,335	120,305
Patents, etc.	21,923	16,384
All other assets	11,894	7,446
Total	$882,434	$971,086

LIABILITIES (000 omitted)

	1914	*1918*
Capital stock	$591,596	$571,431
Funded debt	77,215	80,271
Payables	60,646	99,174
Other obligations	6,162	14,609
Reserves for taxes	28	3,570
Profit and loss	146,787	202,031
Total	$882,434	$971,086

It will be seen that these concerns have increased their total assets by nearly 89 millions, but that nearly 73 millions of this amount have gone into plant and other tangible property. Receivables have increased nearly 13 millions, investments by less than half a million, and cash by 10 millions. Meanwhile the funded debt, payables and other obligations have risen from 144 millions to 194 millions. The quick assets of these concerns totaled 345 millions in 1914, while the debts and other obligations amounted to 144 millions, a comparatively favorable showing. In 1918, however, the quick assets amounted to 435 millions and the indebtedness to 194 millions, a condition more nearly approaching the limit of indebtedness which bankers fix for ordinary commercial loans. A further significant fact is that

for the 50 millions of increased obligations the concerns show chiefly an increase in "other tangible property", that is, their merchandise account, which is precisely the kind of asset most likely to shrink when industry readjusts itself to a peace basis. While these concerns can show an increase of more than 55 millions in their profit-and-loss accounts, this increase must be regarded as nothing more than a paper, or book, profit, which will not be actually realized until the debts incurred since 1914 have been paid and inventories have been readjusted so far as necessary upon a basis of peace values. With a group representing such diversity of conditions as prevails in Class B further generalization is difficult.

So much for the 148 concerns which fall in the not-expanded group. Forty of them have prospered and can make the very satisfactory showing revealed by Class A, but they have not been expanding their operations in order to aid in the prosecution of the war. Thirty-four of them, on the other hand, have fallen upon evil days and make the very unsatisfactory showing exhibited by Class C. They have not been injured by war taxation because they have had little or nothing to tax. The remaining 74 concerns, exactly one-half of the total, are in the somewhat unsatisfactory position exhibited by Class B. They have increased their loans in order to finance the purchase of materials and supplies at inflated prices, and unless they improve their condition before a period of readjustment comes they will have some difficult problems to solve. On the face of the returns to-day, however, their indebtedness is still less than half their quick assets, so that we cannot consign them to the limbo of Class C. If times were normal, we could say that the growth of their profit-and-loss account indicates that they have been making money; but times are not normal, and the ultimate result cannot be foretold.

We now turn to the expanded concerns which are the most significant ones for the student of war taxation. They may be classified, like the not-expanded concerns, according to their financial condition in 1918. For Class A, which includes 62 companies, the statistics are as follows:

ASSETS (000 omitted)

	1914	*1918*
Plant account, etc.	$466,890	$528,928
Other tangible property	133,649	208,481
Receivables	72,995	139,682
Investments	33,374	75,945
Cash	28,358	54,098
Good will	6,515	9,703
Patents, etc.	3,846	3,412
All other assets	5,130	18,917
Total	$750,757	$1,039,166

LIABILITIES (000 omitted)

	1914	*1918*
Capital stock	$407,906	$454,082
Funded debt	125,896	94,830
Payables	43,977	41,361
Other obligations	15,608	30,367
Reserves for taxes	110	34,087
Profit and loss	157,260	384,439
Total	$750,757	$1,039,166

These concerns have increased their assets by over 288 millions, or approximately 38 per cent. At the same time they have decreased their funded debt, payables, and other obligations from 185 millions to 166 millions. Their expansion has been financed chiefly out of accumulated profits, and their profit-and-loss account has increased by 227 millions in four years. The outstanding capital stock has increased by somewhat more than 46 millions, partly by stock dividends representing a distribution of profits that would otherwise have increased further the profit and loss account of 1918. Looking at these concerns from the banker's point of view, we find that in 1914 their quick assets amounted to 269 millions, and their funded debt, payables and other obligations to 185 millions; the quick liabilities exceeding the proportion which would be considered satisfactory as a basis for an ordinary bank loan. In 1918, however, the quick assets amounted to 478 millions and the indebtedness to 166 millions, a proportion which establishes a very favorable basis for credit.

Of especial significance is the constitution of the assets. Plant account has increased by 62 millions, but in a relatively small proportion. Other tangible property has increased by 75 millions, or by 58 per cent, but this is not a very large increase for such times as we have been going through. Receivables have

nearly doubled, and in 1918 amounted to over eighty per cent of all the indebtedness. The largest proportionate increase is found in the investments which are 42 millions larger than in 1918, while the cash has risen from 28 to 54 millions. The investments and cash in 1918 totaled 130 millions, and equaled almost eighty per cent of the total indebtedness. There is, indeed, an accrued liability for taxes amounting to 34 millions; but if these were paid, the concerns would still have 96 millions of cash and investments, which would greatly exceed their entire unfunded debt; while their accounts, investments and cash remaining after the payment of taxes exceed by nearly fifty per cent their total indebtedness.

Obviously the concerns in Class A have husbanded their profits against any contingency that may arise after the war. Inventories may shrink in value, some of their receivables may have to be written off, while their indebtedness will have to be met in any event; but these companies have reduced their indebtedness in a period of inflation, have accumulated liquid assets against time of need, and seem able to weather any storms that may be encountered in the immediate or distant future. Conservative management doubtless accounts for this in part; to some extent it appears due to the fact that the excess-profits tax, working in its own erratic way, bore lightly upon certain classes of concerns. But it appears due chiefly to two very significant facts: first, the fact that these concerns expanded to a comparatively moderate extent; and second, the fact that they could expand without increasing very heavily their investments in bricks, mortar, and merchandise. While their total assets have increased over 288 millions, their plant account and other tangible property show an aggregate increase of only 137 millions. Their new plants and increased inventories have been financed out of accumulated earnings which have been sufficient not only to provide for such financing but also to reduce debts and enable the companies to accumulate a large amount of liquid assets. This conclusion will be strikingly reinforced by studies of the expanded concerns included in classes B and C.

The condition of the 124 concerns in Class B is shown by the following figures:

ASSETS (000 omitted)

	1914	1918
Plant account, etc.	$534.058	$701,448
Other tangible property	246,540	525,840
Receivables	169,088	322,157
Investments	55,127	76,958
Cash	47,707	72,880
Good will	118,202	127,848
Patents, etc.	17,037	17,293
All other assets	9,607	14,300
Total	$1,197,366	$1,858,724

LIABILITIES (000 omitted)

	1914	1918
Capital stock	$747,978	$856,102
Funded debt	121,849	118,994
Payables	124,357	302,762
Other obligations	7,635	23,307
Reserves for taxes	293	39,307
Profit and loss	195,254	518,252
Total	$1,197,366	$1,858,724

It will be seen that these companies have increased their assets by more than 661 millions, or approximately 55 per cent. But, unlike the concerns in Class A, they have increased their payables by 178 millions and their other obligations by nearly 16 millions, a total of 194 millions, which is offset to an inappreciable extent by a decrease of less than three millions in their funded debt. Their total indebtedness has increased from 253 millions to 445 millions, or by approximately 192 millions. Yet these concerns have made a great deal of money as is shown by the increase of their profit-and-loss accounts from 195 millions to 518 millions, or by the tidy sum of 323 millions. The profits of the four years are further reflected in the increase of the capital stock from 747 millions to 856 millions, which has been accomplished to a considerable extent by stock dividends representing accumulated profits. The increase of the capital stock and of the profit-and-loss accounts aggregates 431 millions, and yet these concerns have increased their indebtedness by 192 millions. Looking at these companies from the banker's point of view, we find that in 1914 their quick assets amounted to 518 millions and that their total indebtedness was 253 millions, their debts amounting to slightly less than one-half of their "quick". In 1918 their quick assets stood at 998 millions and their total indebtedness at 445 millions, a proportion somewhat more favorable than

that obtaining in 1914. But it is to be noted that they had accrued liabilities for taxes for which they had set up 39 millions of reserves, and that their cash should be reduced by this amount; so that their quick assets should really be placed at 959 millions. This allowance, however, still leaves these companies with a slightly smaller proportion of indebtedness than they showed in 1914. But the improvement was apparent rather than real. The quick assets of 1914 were based upon inventories taken at normal prices, while those for 1918 reflect inventory values that are more or less inflated. The most significant figure in this connection is the increase of 279 millions in the item of other tangible property. The condition of these concerns may be summarized as follows: they have made very large book profits since 1914, profits far larger on paper than those made by the concerns in Class A; but they have been obliged to increase their unfunded indebtedness by 194 millions, and they are carrying larger plants and swollen inventories at values considerably higher than may be warranted after the war. With good luck they may be able to reduce their debts to a normal basis, write off a considerable part of their war plants, and "clean up" their present inventories without excessive loss; but until and unless these things are done, they will not have "realized" their war profits.

We now pass to the 68 companies in Class C, the condition of which is shown by the following figures:

ASSETS (000 omitted)

	1914	*1918*
Plant account, etc.	$397,176	$474,511
Other tangible property	130,093	395,801
Receivables	101,069	175,869
Investments	20,395	42,922
Cash	27,525	55,264
Good will	25,680	29,284
Patents, etc.	4,255	3,806
All other assets	9,391	17,477
Total	$715,584	$1,194,934

LIABILITIES (000 omitted)

	1914	*1918*
Capital stock	$473,170	$570,265
Funded debt	49,745	115,502
Payables	82,107	275,708
Other obligations	4,382	11,352
Reserves for taxes	263	11,296
Profit and loss	105,917	210,811
Total	$715,584	$1,194,934

It will be seen that between 1914 and 1918 these concerns increased their assets by 479 millions, or 67 per cent. But in order to do this they increased their funded debt by 66 millions, their payables by 193 millions, and their other obligations by 7 millions; their total indebtedness increasing by 266 millions, or over 190 per cent. Yet they have made substantial profits, since their profit-and-loss account has risen from 105 millions to 210 millions, or by a hundred per cent. They have also increased their capital stock by 97 millions, in some part through stock dividends representing accumulated profits. Their book profits are much smaller than those of concerns in Class B, and somewhat less than those of concerns in Class A; but their profit-and-loss account has doubled in four years in spite of the diminution caused by stock dividends, so that it is evident that they have made profits which would be considered large in ordinary times. In spite of this fact, however, from the banker's point of view their condition in 1918 was very unfavorable. In 1914 these concerns had quick assets of 279 millions and their total indebtedness was 136 millions, or a trifle less than one-half of their "quick". In 1918, however, their quick assets amounted to 670 millions while their total indebtedness stood at 402 millions, which was 60 per cent of their "quick". If allowance is made for accrued taxes, for which reserves of 11 millions have been set up, the showing would be still more unfavorable. Another bad feature is that, whereas in 1914 nearly forty per cent of the indebtedness was funded, in 1918 the proportion of funded debt had fallen to twenty-nine per cent. It is evident that these companies have expanded in a manner that has compelled them to extend their credit to an undesirable degree, and that they will be very fortunate indeed if they succeed in liquidating their debts, writing down their war plants, and realizing upon their inflated inventories, without experiencing serious embarrassment.

It will be recalled that we found that the highly prosperous concerns in Class A had expanded to a comparatively moderate extent and had not been obliged to increase very heavily their plant and inventory accounts; and we attributed to these facts the highly satisfactory condition revealed by the balance sheets of 1918. This conclusion is strongly reinforced by comparing Class A with Classes B and C.

In the first place the statistics show that Class A increased its assets and liabilities by 38 per cent; while Class B shows an in-

crease of 55 per cent and Class C of 67 per cent. Manifestly there seems to be a very close relation between the extent to which a concern has expanded and the strength of its financial position in 1918, and it is obvious that such strength is, roughly, in inverse proportion to the extent of the expansion.

Turning next to the plant and inventory accounts we find that the plant accounts of Class A increased thirteen per cent; while those of Class B increased thirty-one per cent, and those of Class C increased twenty per cent. At this point the results of the comparison are not uniform, since Class C makes a better showing than Class B; but it is evident that Classes B and C have increased their plant accounts decidedly more than Class A, and it will presently appear that the advantage which Class C has over Class B is more than offset by the change that has occurred in the respective inventory accounts. Examination of these accounts shows that Class A has increased its other tangible property by 58 per cent, that Class B has increased it by 112 per cent, and that Class C has increased it by 204 per cent. Here the approximately inverse relation between the increase of a class of tangible assets and the financial strength of an expanded company in 1918 most clearly asserts itself; and, since with all classes of companies the increase of the other tangible property has been so much greater than the increase of the plant account, we may regard this as the most vital point of the comparison. Rising prices have compelled all expanded concerns to carry greatly increased inventories, and there is a clear and striking relation between the increase of this class of assets and the financial condition in which companies find themselves in 1918.

Accounts receivable, provided that they are reasonably good, are obviously a better asset than new plants acquired at war prices or merchandise carried at inflated valuations. No definite information justifies the assumption that, if the return of peace forces readjustments in industry, the receivables of any one of the three classes of expanded companies will show a greater shrinkage than those of any of the others. On *a priori* grounds we might conjecture that the more conservative concerns, which have expanded least, will have to write off a smaller proportion of their receivables than those companies which have expanded more rapidly; but so much of the business has been on government account that it would be dangerous to indulge in conjecture, and it is better to assume that the receivables of all classes of concerns stand on

approximately the same footing. The statistics show that the receivables of companies in Class A have increased nearly 92 per cent, that the receivables of companies in Class B have increased 90 per cent, and that the receivables of companies in Class C have increased about 74 per cent. The difference is not so marked as in the case of plant and inventory accounts; but, such as it is, it tells in favor of Class A.

The item of investments next invites attention. To the extent that investments consist of Liberty bonds or other disposable securities they obviously contribute very greatly to financial stability. Class A has increased its investments by 42 millions, or 130 per cent; Class B shows an increase of nearly 22 millions, or approximately 40 per cent; while Class C shows an increase of 22 millions, or 110 per cent; Class A obviously making the best showing, but Class C appearing to have an advantage over Class B. This advantage is probably apparent and not real. The item of investments does not consist wholly of Liberty bonds or other disposable securities, but includes, in many cases, stocks and notes or other obligations of subsidiary companies. Exact data are impossible to secure; but it has been determined that companies in Class B and Class C are carrying as investments large amounts of stocks or obligations of subsidiaries, and that the investments of Class A consist very largely of disposable securities. That this conclusion, based upon the study of such details of the investment accounts as are available, is fully warranted can be shown by an examination of the current indebtedness of the various classes of companies. Class C, between 1914 and 1918, increased its payables from 82 to 275 millions, and it is not conceivable that companies compelled to increase their current obligations to such an extent were able to increase their holdings of Liberty bonds and other disposable securities by 22 millions, or 110 per cent. Some of these companies have, indeed, subscribed to Liberty bonds, but have subsequently been obliged to dispose of them. As for ordinary investment securities, it is certain that they have not been buying them at a time when they have been drawing upon their credit to the extent indicated by their funded debt and payables. We may fairly conclude, therefore, that Class A is the only one of the three classes that has been in a position to acquire any large amount of disposable securities, and that the increased investment accounts of Classes B and C represent chiefly investments which are tied up in the business of sub-

sidiary companies. The upshot of the matter is that we have definite knowledge that the 75 millions of investments belonging to companies in Class A consist largely of disposable securities and may be regarded as anchors thrown out to the windward; whereas we have evidence that the investments of companies in Classes B and C represent additional sails spread in order to carry the growing requirements of subsidiaries. The investigation leaves no doubt that at this point Class A had, in 1918, a marked advantage over Classes B and C.

In the item of cash it appears that Class A shows an increase of 92 per cent, Class B of 54 per cent, and Class C of 100 per cent. Here, as in the investment account, Class A has an advantage over Class B, but Class C appears to make a better showing than either of the others. When allowance is made for accrued taxes, it is found that, if we assume that the reserves set up by the three classes of companies are neither materially larger nor smaller than the amounts actually needed for the purpose, Class A is left with 20 millions of cash, which is 8 millions less than it had in 1914; Class B is left with 33 millions, which is 14 millions less than it had in 1914; and Class C is left with 44 millions, which is 17 millions more than it had in 1914. This result appears surprising, but it ceases to be so when it is considered that companies in Class A carry among their investments large amounts of the certificates of indebtedness issued by the Federal Government in anticipation of the proceeds of Liberty loans. Classes B and C doubtless hold some of these certificates, but it is certain that they cannot have invested heavily in such things at a time when they have been increasing their current obligations to the extent shown by the table of liabilities. The difference between four per cent and seven per cent or upward would of itself be enough to prevent this. The chief reason, however, why Class C shows so large an increase in the item of cash is that business has grown so greatly that a larger amount of ready money is absolutely necessary. The concerns in Class A have increased their inventory accounts by only 58 per cent, but have increased their cash by 92 per cent. Upon the other hand, concerns in Class C have increased their inventory accounts by 204 per cent and have increased their cash by 100 per cent, so that they probably have less ready money in proportion to the requirements of the business to-day than they had in 1914.

The items of good will, patents, and other assets are not large

enough to effect our problem materially, but it may be noted that all classes of companies have increased slightly the item of good will, probably for the purpose of obtaining such allowance as could be secured in connection with the excess-profits tax. The valuation placed upon patents is not large enough to be material. The increase of other assets is much greater in Class A than in either of the others.

The most important comparison of all is that of the quick assets of the expanded companies with their total indebtedness, and here the changes that have taken place since 1914 are most significant. In that year Class A had debts amounting to 185 millions and quick assets of 269 millions; the proportion of the debts to the "quick" being nearly seventy per cent, which materially exceeded the proportion usually accepted by bankers in connection with ordinary commercial loans. In the same year Class B showed an indebtedness of 253 millions and quick assets of 518 millions, the proportion being a trifle less than one-half. Class C, in the same year, had an indebtedness of 136 millions and quick assets of 279 millions, which also was a trifle less than the proportion of one-half. Evidently, before the recent period of expansion, the concerns in Class A were, from the banker's point of view, in a materially less favorable position than the companies belonging to Classes B and C.

The 1918 figures show a striking change. Class A shows a total indebtedness of 166 millions, with quick assets of 478 millions, the debts being a trifle more than one-third of the " quick ". Class B, on the other hand, had in 1918 an indebtedness of 445 millions, with 998 millions of quick assets, the proportion being somewhat lower than it was in 1914, but not very much below the limit fixed by banker's requirements. Finally Class C, which in 1914 made a better showing than Class A, carried in 1918 an indebtedness of 402 millions with quick assets of 670 millions; the debts amounting to sixty per cent of the "quick". Obviously, the way of the expanded concern is not easy even in time of war profits. A further important fact is that nearly sixty per cent of the debt of concerns in Class A is funded, while the concerns in Classes B and C have funded less than thirty per cent of their indebtedness.

In the foregoing discussion no account has been taken of the policies pursued by the different classes of companies in respect to disbursements for dividends or for moneys withdrawn from

the business of unincorporated concerns. On this point data are available for nearly two-thirds of the companies in Class A, over half of those in Class B, and more than one-third of those in Class C. It appears that, between 1914 and 1918, forty concerns in Class A earned $374,725,000, and paid out to stockholders or other proprietors, exclusive of salaries, $182,090,000, or something less than 49 per cent. Sixty-four concerns in Class B earned $443,642,000 during the same period and disbursed $222,527,000, or a fraction over fifty per cent. Finally, twenty-four concerns in Class C earned $182,629,000 during the period in question and disbursed $88,304,000, or a fraction more than 48 per cent. So far as this incomplete evidence goes, therefore, it appears that there has not been enough difference between the policies pursued by the three classes of concerns to effect materially the situation existing in 1916. Class B has indeed disbursed a slightly larger percentage of its earnings than Class A; but Class C has disbursed a slightly smaller percentage than either of the others. For a slightly larger number of companies data have been obtained concerning the dividend rates maintained from 1914 to 1918. Of forty-two concerns belonging to Class A, 50 per cent increased dividends, 35 per cent maintained the same rates, and 15 per cent reduced dividends. Of eighty-two concerns in Class B, 42 per cent increased dividends, 42 per cent maintained the same rates, and 16 per cent reduced dividends. Of thirty-three concerns in Class C, 24 per cent increased dividends, 36 per cent maintained the same rates, and 39 per cent reduced dividends. These data make it seem probable that companies in Class C have pursued a somewhat more conservative policy than either of the other two classes, so that the condition in which they find themselves in 1918 cannot be attributed to an unduly liberal policy with respect to the distribution of profits.

For a certain number of concerns in each of the three classes it has been possible to obtain data concerning the average rates of dividends from 1914 to 1918. These are shown in the following table:

	1914	*1915*	*1916*	*1917*	*1918*
29 companies in Class A.	6%	5%	6.6%	11%	
61 companies in Class B.	7.5%	6.8%	6.4%	7%	7.5%
25 companies in Class C.	6.1%	5.5%	4%	4.3%	5.5%

These figures confirm the conclusion reached above, that the class of companies which expanded most made the smallest disbursements between 1914 and 1918. In this table the average rates of dividends paid by companies in Class A in 1917 and 1918 have been materially raised by very large disbursements made by two concerns. If these two concerns were excluded, the average dividend rate for 1917 would be 8.3 per cent and that for 1918 would be 10.3 per cent. It will be seen that the available evidence tends to show that the positions in which the three classes of companies find themselves in 1918 are not due to policies pursued with respect to dividends [1] or other disbursements.

It should be observed in this connection, however, that the four hundred and two concerns included in the investigation are mostly companies of fairly large size, none of which have counted their profits by the hundred per cent, as some smaller concerns have been able to do. A striking fact developed by the excess-profits tax is that the smaller concerns have made the largest rates of profit, while few large companies have shown fabulous percentages of earnings. It is partly in view of this fact that the bill now pending in Congress proposes to fix a maximum limit to the tax that shall be imposed upon small concerns. If data had been obtainable concerning the most prosperous classes of smaller concerns, it might have been found that conditions differ materially from those obtaining among the larger companies. Successful small concerns enjoy not only larger profits but also less publicity.

Analysis of the data gathered concerning the four hundred and two concerns which have been investigated seems to point to the following conclusions:

1. Class A of the concerns which have not expanded is in a much better position than any other class of companies in 1918. The indebtedness of these concerns is hardly more than one-fifth of their quick assets. Their plant accounts are less than they were in 1914, and their merchandise accounts are no greater. They have reduced their receivables, probably by closer collections, and they have enormously increased their investments and their cash. They hold cash sufficient to pay all the taxes for which they have set up reserves, liquidate their current accounts,

[1] All the statistics given above relate to cash dividends, stock dividends being excluded.

extinguish all other obligations except their funded debt, which is very small, and still leave them nearly seventeen millions of money on hand which would be practically half as much as they carried in 1914. But these concerns have not done as much as the expanded companies to help us win the war.

2. Class B of the not-expanded concerns seems to have prospered moderately; but its war profits have not yet been converted into cash, and will not be until its debts have been reduced and its inventories readjusted as far as may be necessary when peace returns.

3. Class C of the not-expanded concerns presents no problem for the student of war taxation because it has not been making enough money to be affected materially by either the income or the excess-profits tax. This is sufficiently indicated by the insignificant reserves for taxes set up in 1918.

4. Of the 254 concerns which have expanded, less than a quarter (62) made a showing in 1918 which entitled them to be placed in Class A; the other three-quarters have made large book profits, but they have at the same time drawn heavily upon their credit and they are still a considerable distance—some of them, indeed, are very far—from dry land.

5. The 62 expanded concerns in Class A are there chiefly because they expanded much less than the other companies, and because they managed to expand without increasing very greatly their investment in plants or merchandise, which may be subject to considerable shrinkage after the war. For these reasons they have been able to reduce their indebtedness and to decrease very greatly the proportion it bears to their quick assets. This is the more noteworthy because in 1914 the ratio of their indebtedness to their "quick" was far higher than that which obtained in the concerns belong to Classes B and C. Testing the credit of the three classes of companies by the standard which a banker would use, we find that the war has completely reversed the conditions of expanded concerns. Class A which was last is now first, and Class C which was in the first rank is now last.

6. Class B of the expanded concerns appears to have made far larger profits than any other class of companies, expanded or not expanded. These profits, however, for the most part still remain in the business which has not only devoured them but has also consumed vast sums of borrowed money. The accumulated profits and borrowed money have been invested chiefly in plants

and inventories which may shrink very largely after the war. With good luck, these companies may be able to reduce their debts and take up a considerable shrinkage in their tangible assets; but only a continuation of large earnings will enable them to do this; while, if these earnings continue to be absorbed very largely by war taxes, it is evident that the concerns will require a long time to reach dry land. Their book profits have been large, but they have not been realized, and a large part of them may never be.

7. The concerns in Class C, precisely because they have expanded most and have accumulated the largest proportion of tangible assets which may be subject to shrinkage after the war, are in a highly unsatisfactory condition in 1918. They appear to have made profits which would be considered large in ordinary times, but they have made smaller profits than concerns in Classes A and B; and for that reason, also, they find themselves in an unsatisfactory position to-day. Several years of large earnings undiminished materially by federal taxation are the only thing that will enable these companies to reach shore. And yet in 1914 they could make a distinctly better showing to a banker than the companies in Class A, since their indebtedness at that time amounted to a much smaller percentage of their quick assets. One of these concerns not long ago published its earnings for the last fiscal year which is later than that to which the statistics relate. It shows a net income several times as large as in the years before the war; but, after allowing for prospective taxes and the ordinary dividends, the company will have a balance of earnings equal to only ten per cent of its indebtedness. Comment is unnecessary.

8. In conclusion it is to be observed that book profits, in times of expansion and inflation, are not the same as realized profits. A concern which expands its operations materially may expect to find that a large part of its war profits will be needed to finance its expanded business; while, if it expands beyond a certain moderate extent, it may also expect to be obliged to borrow very large sums of money. If its earnings are large and are not absorbed by excessive taxes, it may reasonably expect to repay its loans, provide for a possible shrinkage of its tangible assets, and ultimately realize its war profits. But expansion has its hazards, and these seem to be in direct proportion to its extent. War taxation, in particular, is a most serious hazard, the import-

ance of which may be more fully realized next spring than it is to-day. Events may yet prove that in not a few cases our income and excess-profits taxes are imposed upon income that can never be realized and upon profit that will yet turn into loss. In any case, it is certain that the return of peace renders it necessary for Congress to consider carefully the effects of proposed revenue legislation upon the readjustments which now seem to lie ahead of American industry.

II

CONSUMPTION AND OTHER INDIRECT TAXES

Governments are dependent for their tax revenue, upon two main groups of taxation: (1) taxes levied on property or income, *i. e.*, property in the hands of its owner or in the process of distribution on the death of its owner, and income in the making or in the hands of the final recipient; (2) taxes levied upon specific articles in the process of production or in the hands of the user—the so-called consumption taxes.

There are other subjects of taxation, such as transactions, legal and commercial documents, the pursuit of specified occupations and polls. These, however, play a minor part and find their justification rather in the fact that they can be made to yield a moderate amount of revenue without imposing a serious burden on the individual taxpayer than in any theory of an equitable distribution of the burden of taxation.

The great advantage of the first group of taxes is that they present an opportunity for a distribution of the burden of taxation with some approximation to ability to pay. The great advantage of the second group is that they afford the best means of getting at the tax-paying capacity of people, individually possessing property or income in amounts too small to be effectively reached by property and income taxes, but into whose hands, in the aggregate, passes the greater part of the national income. Regressive in character when taken by themselves, these taxes when combined with property and progressive income taxes constitute an essential element in a well-balanced tax system. They cannot be regarded as unduly burdensome if they are levied not on necessaries but on comforts or on articles the consumption of which can be curtailed without real injury or perhaps even with benefit. Their influence in discouraging harmful consumption is in fact an additional point in their favor.

The subjects of taxation best fitted to meet these requirements, and which are consumed in quantities sufficiently large to yield substantial revenue, are few in number. The subjects of taxation may of course be so chosen that the burden will fall on the classes reached by property and income taxes. When so em-

ployed, however, consumption taxes lose their distinctive advantage except in so far as they are used to curtail the consumption of harmful goods. Hitherto in the United States the federal government has derived its tax revenue almost wholly from consumption taxes in the form of duties on imports and, since the Civil War, excise taxes on liquors and tobacco. In time of war the range of federal taxation has been temporarily extended, but even at such times the direct taxation of property or income has played a minor part.[1] The states and local divisions have, on the other hand, relied mainly on the general property tax supplemented in recent years by taxes on corporations and inheritances.[2]

This differentiation has been due in part to the provisions of the constitution granting to the federal government the exclusive use of duties on imports but restricting its employment of direct taxes by the requirement that they be apportioned among the states on the basis of population. These constitutional restrictions have not been, however, the sole determining factor. The term "direct tax" as used in the constitution had been so narrowly interpreted by the supreme court, prior to 1895, that the federal government was probably free to use any tax other than a tax on polls or on land both of which were ruled out in practice because undoubtedly subject to the rule of apportionment. As a matter of fact, during the Civil War it did levy both income and inheritance taxes and was sustained by the court in so doing. If on the resumption of normal conditions it relied chiefly on consumption taxes in the form of custom duties and excise taxes on liquors and tobacco, it was because these were regarded as legitimate sources of revenue, peculiarly adapted to federal administration, and yielding sufficient revenue to meet the needs of the government. The constitutional restriction was first really felt when, in 1895, the supreme court virtually reversed its position and declared unconstitutional an income tax law enacted for the purpose of supplying a deficiency in the revenue due to

1 Of the 1,150 millions of tax revenue collected by the federal government between July 1, 1861 and June 30, 1866, over seventy-five per cent came from consumption taxes while not over fifteen per cent came from direct taxes. A comparison of these figures with those in the appendix to this report shows a striking contrast.

2 While consumption taxes supplied about ninety-five per cent of the total tax revenue of the federal government in 1913, the census figures of wealth, debt and taxation indicate that they yielded about one-third of the tax revenue of all branches of government.

industrial depression and the reduction of tariff duties. It is however, doubtful, whether, if the law had been sustained, it would have materially altered our system of federal taxation, except possibly during the period of the Spanish War. With the return of business prosperity and a high tariff policy consumption taxes again proved adequate not only for normal, but even for war, needs.

The constitutional restriction, in so far as it affected income taxes, was removed by the adoption of the sixteenth amendment in 1913. An income tax, at a low rate and with large exemption, was therefore immediately enacted under circumstances similar to those of 1894, namely, an anticipated deficiency in revenue due to a reduction of the tariff. It may be safely said, however, that there was little expectation that the new tax would displace consumption taxes as the main source of federal revenue in normal times. It was regarded rather as a reserve power to be employed only in times of emergency. In 1914, the first year of the income tax, consumption taxes yielded 89½ per cent of the total tax revenue. Moreover, it did not necessarily follow that the whole burden even of emergency taxation would be thrown on the new tax. The excise taxes on liquors and tobacco were low [1] and capable of great expansion; the list of articles and transactions subjected to excise taxation could be greatly extended; and imported food luxuries, such as coffee, tea, and cocoa, capable of yielding considerable revenue, were on the free list. These resources had proved adequate to finance the Civil War and the Spanish War and it was natural to assume that they would be again utilized in times of emergency.

Opinion in regard to the income tax had, however, undergone a radical change since the period of the Civil War. Its revenue possibilities were great and it offered distinct advantages from the political standpoint. These advantages however, do not in our opinion justify its exclusive use in meeting a great emergency just as they do not justify its exclusive use in normal times. There is no reason why all classes should not be called upon to bear their fair share of the burdens imposed by a great war, as well as of the normal burden in time of peace. We undoubtedly erred in the Civil War in placing too much of the burden on the

[1] $1.10 per gallon on distilled spirits; $1.00 per barrel of 31 gallons on fermented liquors; on cigars $3.00 per thousand; on cigarettes $1.25 per thousand; on manufactured tobacco and snuff 8c. per pound.

masses of the people and too little on those of large tax-paying ability. It is possible, however, to err in the opposite direction. If the emergency is so great as to demand the utilization of the tax-paying power of the community to the full, such an error may even prove disastrous by creating a sense of injustice, discouraging industrial effort, and drying up the sources of revenue upon which the Government must rely for the maintenance and increase of its revenue. A well-balanced tax system is desirable even in times of emergency.

Our immediate purpose is to consider: (1) whether in meeting the present emergency taxes other than income taxes, particularly consumption taxes, have been utilized as fully as they should have been; and (2) the part which these taxes should play during the period of readjustment and debt payment.

The outbreak of the European war resulted in a diminution of revenue (through the disturbance in economic conditions) and an increased expenditure by the federal government, thus necessitating legislation for increasing the revenue. The act of October 22, 1914, raised the tax on fermented liquors from one dollar to a dollar and a half per barrel, increased the tax on grape brandy used to fortify sweet wine, and imposed low duties on the following: manufacturers of, and dealers in, tobacco; receipts for freight and express packages; various documents; insurance premiums; telegraph and telephone messages; seats in parlor cars; perfumery; cosmetics and toilet articles; and a limited list of occupations.

By the act of September 8, 1916, the taxes on documents, cosmetics, toilet articles, and telegraph and telephone messages were repealed, and taxes on corporation stock, the profits of munition manufacturers, and the distribution of estates were added. The only consumption taxes increased were those on wines. The additional revenue provided by the increase of consumption taxes in these acts was slight, in fact no more than sufficient to offset the loss in customs revenue following the disturbance in economic conditions which was caused by the war. The net result was that revenue from consumption taxes, together with the new taxes on transactions and occupations, in 1917 exceeded the revenue from consumption taxes in 1914 by only thirty million dollars, or five per cent. Indeed there would have been no excess at all had it not been for the increased withdrawals of distilled liquors due to an anticipated increase in the rates of taxation which did not take place.

The total tax revenue had, however, increased during the interval by 363 millions (equal to 65 per cent), 299 millions of which was derived from the income tax, the remainder (other than the thirty million dollars noted above) coming from taxes on the capital stock of corporations, from the profits of manufacturers of munitions and from estates. Broadly speaking, the deficiency in customs revenue was made good by increasing internal taxes, other than the income tax, while the latter was used to supply the additional revenue needed. In view of the amount of the additional revenue required, this policy was perhaps not open to serious criticism, although the rates on distilled liquors and tobacco might well have been somewhat increased.

Our entrance into the war in 1917 involved an increase of expenditure to a total originally estimated at approximately eight billions, exclusive of advances to our allies. It was determined to provide substantially half of this amount by taxation. This would involve taxes of four billions as compared with 672 millions in 1914 and 1,035 millions in 1917. Such an increase was bound to impose a severe strain on the taxpaying power of the nation. It demanded that the greatest care be taken, in order to secure an equitable distribution of the burden, to avoid hampering productive energy and drying up the sources from which the future increase of taxes must be drawn; and finally to encourage the redistribution of the productive forces demanded for the maintenance and development of the essential industries.

The tax act of October, 1917, provided what, in view of the enormous increase in the total tax revenue contemplated, must be regarded as an extremely moderate advance in the rates of the long-established internal consumption taxes. The rates on distilled liquors were increased from $1.10 per gallon to $3.20 per gallon when withdrawn for beverage purposes, and to $2.20, when withdrawn for other purposes; on fermented liquors from $1.50 to $3.00 per barrel. The rates on wine were doubled. For a flat rate of three dollars per thousand on cigars there were substituted rates which varied from four dollars per thousand on cigars retailing between four and seven cents to ten dollars on cigars retailing at over twenty cents. On cigarettes the increase was from $1.25 to $2.05 per thousand, and on manufactured tobacco from eight to thirteen cents per pound. Taxes at very moderate rates were also imposed on a variety of beverages, commonly known as soft drinks, on automobiles and motorcycles, on

moving-picture films, on sporting goods, and on a limited list of articles which fall in the class of luxuries. The documentary stamp duties and the taxes on cosmetics and toilet articles, repealed in 1916, were re-established and taxes on proprietary medicines were added. Taxes of ten per cent were levied on club dues, and on admissions to places of amusement. Freight charges were taxed three per cent, express charges five per cent, passenger fares eight per cent, parlor car seats and berths ten per cent, telegraph and telephone messages five cents, when the charge exceeded fifteen cents, and charges for the transportation of oil by pipe line five per cent. Taxes were also imposed on insurance policies and the taxes on estates were materially increased. Import duties were unaltered except in so far as was necessary to compensate the changes in internal taxes. Tea, coffee and cocoa remained on the free list. The combined result of these changes, as shown in the receipts for the year 1918, was an increase from 387 to 600 millions (55%) in the revenue from liquors and tobacco and an increase from 7 to 144 millions from other internal consumption taxes. These increases were, however, in part, offset by a fall of 46 millions in customs revenue, with a resulting net increase in all consumption taxes from 620 millions to 925 millions (49%).

Estate taxes, insurance taxes, and documentary stamp duties, yielded an increase of 56 millions; but the great bulk of the increased revenue was furnished by the income tax and the excess-profits tax (an income tax in the broad sense of the term) which together yielded 2,852 millions as compared with 388 millions from income and munitions profits taxes in the preceding year, an increase of 635 per cent. Consumption taxes, including under this head taxes on transportation and transmission of messages, club dues and admissions to places of amusement, yielded 24 per cent of the total tax revenue as compared with 60 per cent in 1917, and 89 per cent in 1914.

It is open to question whether such disproportionate increases in certain consumption and income taxes were justified and whether the excess-profits tax, in particular, levied in many instances on profits which were merely accounting profits and would become actual profits only if the war should continue, did not threaten to hamper the expansion of industry and to dry up the sources of future revenue. Hundreds of millions of dollars could have been raised by higher rates on liquors and tobacco and by the

taxation of tea, coffee and cocoa, without imposing any undue burden on the classes not reached by the income tax. The fact of this disproportion and the necessity of a more radical increase in consumption taxes seem to have been realized, in some degree, by the House committee in preparing the bill passed in October, 1918. The prospect of the continuance of the war appeared to demand the doubling of the tax revenue. The bill as passed by the House provided an estimated full-year increase of 1,340 millions (112%) [1] from consumption taxes, when compared with the full-year revenue under the act of October 1917, as well as an increase of 2,326 millions [2] (72%) from income and excess-profits taxes. According to the estimates of that committee, consumption taxes would yield in a full year under the bill thirty per cent of the total tax revenue as compared with twenty-four per cent in 1918, and twenty-six per cent in a full year under the act of October 1917.

This increase in consumption taxes was accomplished mainly by raising radically the rates on liquors (from $3.20 to eight dollars per gallon on distilled spirits, when used for beverage purposes, and from three to six dollars per barrel on fermented liquors), doubling the rates on cigars and manufactured tobacco, and increasing the rates on cigarettes from $2.05 per thousand to $4.10 per thousand on cigarettes retailing for less than two cents and $5.10 on those retailing at two cents or over. It was estimated that one-half of the total anticipated increase in revenue from consumption taxes as compared with 1918, and two-thirds as compared with a full year under existing law, would be derived from these sources. The remaining increase from consumption taxes was to come from a great extension of the list of luxury taxes, from doubling the rates on admissions and club dues, and from an increase of taxes on soft drinks and telegraph and telephone messages. The most important item in this list were the luxury taxes, which if we include the taxes on gasoline (forty millions) and the license taxes on motorcycles and automobiles (almost seventy-three millions) were expected to yield 591 millions as compared with 37 millions in 1918 and 76 millions under a full year of the existing law. The estate duties were also materially augmented.

1 This calculation includes, in consumption taxes, custom duties which are not included by the House committee.

2 The estimated increase in the income tax was from 1,459 million to 2,376 millions; in the excess-profits tax from 1,791 millions to 3,200 millions.

While the bill recognizes more fully than earlier legislation the necessity of increasing consumption taxes, it might well have accomplished still more in this direction. Taxation of coffee, tea and cocoa, at rates lower than those now in force in Great Britain, and an addition of two cents per pound to the import duties on sugar, with a corresponding excise duty on the domestic product, a still further increase in the tobacco rates and a tax of one per cent on retail sales would probably have yielded over 500 millions. Although the tax on sales is one that ought to be resorted to only in last instance, there is no doubt but that at a time when it was necessary to plan for the utilization of the tax-paying power of the nation to the fullest possible extent such taxes could scarcely be considered as unduly burdensome. They were accordingly well worthy of consideration as a partial substitute for the additional 1,400 millions which the bill proposed to levy on the apparent profits of industry.[1]

The House bill however is already ancient history. The problems which we faced in October have undergone a complete change. We are asked to raise for the current year not eight billions but six billions, with the prospect of a steady reduction during succeeding years until our tax system is again adjusted to peace conditions at some level of revenue which cannot yet be more than very roughly estimated as probably between two and three billions.

The immediate problem is still one of increased taxation, but

[1] The English rates per pound on these articles were as follows [The figures outside the parentheses are the peace rates, the figures in parentheses, the existing rates]:

Tea 10c (24c); coffee 4c (9c); cocoa 2c (9c); sugar (98°) 4c (3c). The rate proposed in the present budget is 5.7c. The bulk of our imported sugar comes from Cuba; is between 94° and 96°; and is taxed at rates of 1.23c and 1.25c per pound, less 20%, or about 1c per pound. The rate on sugar between 98° and 99° is 1.334c per pound less 20% or 1.067c per pound. The rates in mind in making the above estimate of possible revenues are: coffee, 7c per pound; tea 16c per pound; cocoa 8c per pound; sugar three times the present rate, with an excise tax of 2c per pound on the domestic product.

These rates on tea, coffee and cocoa might be expected to yield 100 millions and the increased rate on sugar 150 millions. For the possibility of increased revenue from tobacco, see the appendix, p. 62. A tax of one per cent on retail sales might be expected to yield 300 millions. It is not meant to suggest that all these taxes should have been levied at this time, but rather that it would have been wise to provide for additional revenues from consumption taxes, and that such sources of additional revenue were available.

it cannot be entirely separated from the problem of a subsequent reduction; for it will evidently be desirable to obtain revenue for the current year, if possible, from an increase of existing taxes rather than to resort to new taxes, involving annoyance and the likelihood of administrative difficulties, unless they are of a character to be maintained as a permanent part of our tax system. Thus it is doubtful whether it would be wise to adopt the new luxury taxes which are distinctly novel in character, and which might involve considerable difficulties of administration. These can hardly be regarded as a desirable form of consumption taxes in times of peace, since they bear on classes which can be effectively reached through the income tax. The same objection does not hold against the increase of the taxes on liquors and tobacco, proposed in the House bill, since these taxes will unquestionably remain a permanent part of our tax system, unless we adopt the policy of prohibition of the manufacture and sale of liquor. This possibility complicates, of course, the problem of the part which consumption taxes are to play in our fiscal system in the future, and of the forms which such taxes should take. If prohibition becomes the permanent policy of the nation we must face the question whether it is better to provide new consumption taxes to take their place, or to compensate the deficiency by adding to the direct taxes.

Assuming for the present that the manufacture and sale of liquor will continue, it would be wise to adopt the increased rates contained in the house bill and, also, for the current year, the tax on gasoline and the license taxes on motorcycles and automobiles. If this were done and if the income tax rates proposed in the House bill were also accepted, the total tax revenue for the year 1918-19, as estimated by the House committee, would be substantially, six billions,[1] of which the income and excess-profits

[1] Estimated full-year revenue under existing law	$4,597,000,000
Revenue from increase of income tax	917,000,000
Half-year revenue from increase of taxes on liquors and tobacco	350,000,000
Half-year revenue from gasoline tax	20,000,000
Revenue from licenses on automobiles and motorcycles	76,000,000
	$5,960,000,000

The first figure includes a yield from internal revenue, other than income and excess-profits taxes, of 1,168 millions. The revenue from such sources July 1, to November 5, 1918, was 405 millions, which would indicate that the estimate is being substantially realized.

tax would yield seventy per cent, consumption taxes twenty-eight per cent, and other taxes two per cent. This would make it possible for the excess-profits tax to remain as it is, so far as yield is concerned. But, as has been intimated in another part of this report, it is a serious question as to whether it would be wise to impose such a heavy burden on industries trying to adjust themselves to peace conditions. If the rates suggested were maintained, the full-year yield from consumption taxes, as estimated by the House committee, would be over two billions, of which 1,408 millions would come from taxes on liquor and tobacco, 180 millions from customs and the remainder from the new internal taxes established since 1914. If it should appear that six billions is in excess of the amount needed, reductions might be made in the excess-profits tax, in the rates proposed for the income tax, or in the consumption taxes.

If reduction is to be made in the consumption taxes, it seems advisable that it take place in those taxes which are not to be permanently retained. Within this class would fall the taxes on transportation, since they impose a burden on essential industrial processes; taxes on luxuries, admissions, club dues, gasoline and automobiles, since they bear mainly on classes reached through the income tax; and for similar reasons, and because the yield is small in proportion to the annoyance caused, taxes on telegraph and telephone messages. It is questionable also whether the federal tax on estates should be continued, at all events at the suggested high rates, in view of the large and increasing use of this tax which is being made by the states. This brings up, however, the question of the relation of state and federal taxation, which lies beyond the purview of the present committee. Finally, there does not seem to be any valid reason why insurance, or brokerage, should be selected for taxation by the federal government. There may be some reason for the retention of documentary stamp duties, which yield a substantial amount of revenue while imposing a very slight burden; and, if these are to be levied at all, they should be levied at uniform rates throughout the country.

The amount of tax revenue needed will certainly show a marked decrease in 1920, and will continue to decline until a permanent peace adjustment is reached. Consumption taxes would naturally share in the reductions to be made. If the reductions should follow the lines sketched above, there would finally remain

the taxes on liquors and tobacco, taxed at the rates suggested in the House bill (yielding according to the committee's estimate 1,408 millions), and the customs duties. This will be virtually the same system as that which existed before the war. Customs duties could probably be counted on to yield not less than two hundred millions, giving a total revenue from consumption taxes of about 1,600 millions.[1] It is not improbable that, as a result of the higher level of ordinary expenditures after the war, this sum will just about suffice to meet such expenditures, as did the revenue from the same sources before the war. If income taxes (in the form of the income tax proper or the excess-profits tax) should be levied in quantity sufficient to care for the interest and principal of the debt we reach an adjustment under which that portion of the war burden represented by the increase in normal expenditure would be borne by consumption taxes, while the portion represented by accumulated debt would be borne by income taxes. While too much emphasis must not be placed on this perhaps fortuitous consequence, the resulting distribution would not be unfair, especially if consumption taxes, other than customs, were imposed on liquors and tobacco. High taxes on these articles at all events would not be an excessive contribution for the masses of the people to make as their share in the burden of the war.

This proposal of course loses its force if the prohibition of the manufacture and sale of liquor is to become our national policy in the immediate future. Such a policy would reduce the revenue from consumption taxes under the plan proposed by nearly 1,100 millions. To supply new consumption taxes sufficient to make up this deficiency would be extremely difficult. As already indicated, taxation of what are commonly designated as food luxuries, such as tea, coffee, cocoa and sugar might yield 250 millions,[2] and some additional revenue might be derived from tobacco, the rates on which, particularly on cigars and manufactured tobacco, proposed in the House bill, and contemplated in the calculations of revenue made above, are still well below the rates which have been imposed in England in times of peace.[3]

1 It is possible that distilled liquors may be found to be taxed above the maximum revenue rate and may not yield the revenue anticipated. Whatever deficiency may develop, however, could probably be made up from additional taxes on tobacco. See appendix, p. 62.

2 See note, p. 56.

3 See appendix, p. 62.

These taxes however, would supply only a fraction of the loss, and it is doubtful whether the increase in the taxation of sugar would be justifiable as a permanent policy.

Liquors have met, in an exceptional degree, the requirements of an article suitable for consumption taxation and, in countries which make use of such taxation on a large scale, have been a main element in the system. If they should disappear, it may mean that consumption taxes will sink to a position of minor importance. To this aspect of the question the committee has been unable, because of lack of time and the sudden recent change in the situation, to give sufficient attention to venture an opinion.

In concluding this part of the report, your committee desires to call attention to the fact that it has assumed a form somewhat different from that which would perhaps have been desirable. What the committee originally had in mind was, in addition to presenting the facts and the considerations that have been recounted above, to make a more detailed study of the actual operation and effects of our system of indirect taxes and also to study more at length the general problem of the future relations of direct and indirect taxation, not only as a question of fiscal theory but also with reference to the particular situation of the United States. The accomplishment of these objects, however, has been rendered impossible by the shortness of the time that has elapsed since the taxes were put into operation, as well as by the confusion engendered by the sudden cessation of hostilities together with the possibly near approach of prohibition. Under these circumstances, the committee has deemed it best to limit the discussion to the points mentioned in the report. The other topics are sufficiently important to warrant a careful study by a future committee, if the Association should deem it wise.

APPENDIX

TAX REVENUE
(in millions of dollars)

	1914	1917	1918[1]	Existing Law[2]	House Bill[2]
I. *Consumption Taxes*					
Internal					
1. Distilled spirits (incl. wine)	159	192	318	495[3]	827
2. Fermented liquors	67	92	126		240
3. Tobacco	80	103	156	212	341
Total 1–3	306	387	600	707	1408
4. Transportation	....	....	64	164	165
5. Telegraph and telephone mes's	....	....	6	14	16
6. Luxuries	....	....	37	76	591[4]
7. Admissions and club dues	....	....	29	55	109
8. Other	2	7	9	5[5]	71[5]
Total 4–8	2	7	145	314	952
Total 1–8	309	394	745	1020	2360
Customs duties	292	226	180	180	180
Total I	601	620	925	1200	2540
II. *Income Taxes*					
Individual	28	180	2852	930	1482
Corporation	32	180		529	894
Total	61	360		1459	2376
Excess-profits tax[6]	11	28		1791	3200
Capital stock tax	....	10	25	25	70
Total II	72	398	2877	3275	5646
III. Estate Tax	....	6	47	75	110
Insurance taxes	....	....	6	12	12
Stamp taxes (documents)	....	18	18	32	32
Other taxes	....	3	3	4	23
Total III	....	17	72	123	177
Total I–III	672	1035	3875	4597	8362
Percentage of consumption taxes	89	60	24	26	30

[1] *Preliminary Statement*, September 14, 1918.

[2] Estimated full year yield. *House Report no. 767, 65th Congress, Second Session*, p. 40. Certain minor revenues are omitted from this estimate. There has been added to the committee's estimate receipts from customs as given in the daily treasury statement June 29, 1918.

[3] Estimated; "beverages" less estimated five millions receipts from soft drinks. The revenue from this source was $2,215,000 in 1918.

[4] Includes taxes on gasoline ($40,000,000) and license taxes on motorcycles and automobiles ($72,930,000).

[5] Soft drinks.

[6] The entry for 1914 is for excise tax; for 1917, munitions profits tax.

RATES ON LIQUORS AND TOBACCO IN GREAT BRITAIN AND THE UNITED STATES

Distilled Spirits

(Per gallon)

	Pre-War	*1918*	*Proposed for 1919*[12]
Great Britain	$3.58	$3.58	$7.29
United States	1.10	3.20	8.00

Fermented Liquors

(Per barrel of 36 gallons in Great Britain)
(Per barrel of 31 gallons in United States)

	Pre-War	*1918*	*Proposed for 1919*[12]
Great Britain	$1.88	$6.08	$12.15
United States	1.00	3.00	6.00

Cigars

(Per pound in Great Britain. Per 1000 in U. S.)

	Pre-War	*1918*	*Proposed for 1919*[12]
Great Britain[7]	$1.70	$2.98	$3.79
United States[8]	3.00	4.00 to 10.00	5.00 to 20.00
Estimated equivalent per pound[9]	.25	.50	1.00

Cigarettes

(Per pound in Great Britain. Per 1000 in United States)

	Pre-War	*1918*	*Proposed for 1919*[12]
Great Britain[7]	$1.38	$2.41	$3.08
United States[10]	1.25	2.05	4.10 to 5.10
Estimated equivalent per pound[11]	.45	.78	1.67

Manufactured Tobacco

(Per pound)

	Pre-War	*1918*	*Proposed for 1919*[12]
Great Britain[7]	$1.13	$1.98	$2.52
United States	.08	.13	.26

[7] The rates for Great Britain are import duties. There are no excise duties on the manufacture of tobacco. Practically all the tobacco manufactured is imported. The tax levied on the importation of raw tobacco is the base rate. The import duties per pound on the various forms of manufactured tobacco are fixed to compensate the home manufacturer for the duty on the raw material and the waste in manufacture, and correspond, therefore, to the rate per pound the manufacturer would pay if taxed under the excise. Thus the duties on manufactured tobacco are 1.27 times, the duties on cigarettes 1.55 times, and the duties on cigars 1.91 times the duty on raw tobacco. There may be a slight element of protection in these rates. In so far as this is the fact the rates given for the domestic manufacturer are too high, but the error is certainly slight, and, so far as they affect the comparison with the United States, are probably more than offset by the conservative estimate (see notes 9 and 11) of the weight of cigars and cigarettes, and their average selling price, in the latter country. The peace rates on raw tobacco containing more than 10% moisture were 89 cents in pre-war times, $1.56 in 1918, and $1.99 in the present budget.

[8] These are the rates on cigars weighing over 3 pounds per thousand, which furnish the great bulk of the revenue.

[9] It is assumed that cigars average 12 pounds per thousand, certainly conservatively low, and that the average retail price is between 7¢ (8¢ under House Bill) and 15¢, certainly conservatively high. The rate on cigars retailing at these prices is $6. The rate in the House bill is $12.

[10] These are the rates of cigarettes weighing less than 3 pounds per thousand which furnish the great bulk of the revenue.

[11] It is assumed that cigarettes weigh 2¾ pounds per thousand, and that the average rate under the House Bill would be $4.60 per thousand.

[12] Great Britain, budget of April, 1918; United States, House bill.

III

FEDERAL LAND AND CAPITAL TAXES

The problem of land and capital taxes can best be considered as involving two separate questions, (1) should the federal government impose taxes on land or other forms of capital (*i. e.*, property taxes) in time of war as a measure of war finance, and (2) should taxes on land or other forms of capital or a "capital levy" be used after the war as a means of raising funds to extinguish or to reduce the war debt?

I. Federal Property Taxes as a War Measure

Discussion limited to the fiscal problem. In regard to the first question, it is believed that the subject should be approached from the point of view of the needs of war finance. Various lines of argument may be proposed in favor of federal taxes on land or on other forms of capital. Taxes on land alone would be approved by those who favor the single tax or the nationalization of the land. Taxes on capital generally might be favored for the purpose of bringing about a redistribution of fortunes or a greater equality of wealth. The discussion of such arguments is believed not to be pertinent to our present inquiry. The question before us is as to the most equitable and convenient means of raising funds to meet war expenses. A war emergency should not be utilized to promote any project which, given proper time and discussion, would not command approval on its merits; and it is submitted that the exigency of a war is not the time for adequate discussion of the merits of plans for altering the distribution of wealth or the control of industry. It should further be kept in mind that such matters of social reform affect the interests of the states at least as closely as they concern the federal government.

Confining itself, therefore, to fiscal considerations, the committee is of the opinion that the first question should be answered in the negative, that is, that the federal government should not adopt as a war measure the policy of taxing property.

The following is an outline of the grounds upon which this decision is based.

The constitutional problem. First of all, there arises the constitutional problem. Taxes on land and other forms of capital are to be construed as direct taxes and as such could under the present constitution be collected by the federal government only if distributed among the states in proportion to their population. The injustice of this rule of apportionment has appeared clearly on each of the occasions when the United States has levied direct taxes. The inequity of the direct tax of the Civil War was so obvious that Congress even undertook after the war to return it to the states. In each case, moreover, the yield of the tax was slow in collection and disappointing in amount. This has been investigated by numerous students, with the invariable conclusion that revenue can be obtained under the present rule of apportionment only at the cost of serious inequality as between different parts of the country, and that the attempt to secure any large yield by this method would produce such glaring inequality as to be intolerable.

The undesirability of attempting to impose any form of property tax under the present constitutional rule of apportionment is thus demonstrated. But, it may be asked: should the constitution not be amended so as to permit the imposition of such taxes without reference to distribution among the states according to population? There may be arguments in favor of thus removing one of the restrictions upon the taxing power of Congress. We do not deem it necessary to enter into the question here, for the reason that the time required for amending the constitution would probably be so great as to preclude any immediate use of this device.

Interference with state and local tax system. Entirely apart from the constitutional question, one of the strongest arguments against federal property taxes in time of war is that they would invade the field of state and local taxation, with serious if not disastrous results. Throughout the history of the United States the states and their subdivisions have generally been left in possession of the field of direct taxation, whereas their use of indirect taxes has been from the start narrowly restricted by the federal constitution. Yet in spite of almost exclusive rights in the domain of direct taxation the states and local governments have found it increasingly difficult to raise revenue to meet their

growing needs. Moreover, the federal government has of late years made inroads upon the tax domain of the state and local governments. Not only is the inheritance tax a case in point, but the income tax has recently become the mainstay of the federal revenue system. It is true that before the adoption of the federal income tax in 1913 the states had made practically no successful use of this tax. The future, however, is likely to see increasing use of income taxes by the states and this development will now have to take account of the strongly intrenched position of the federal government in this domain. With the present high rates of the federal income tax, the invasion of the field of property taxation by the national government might have serious effects upon the states and their local subdivisions.

If it be urged that during time of war the national government should take precedence and that the activities of other governments should give way where necessary, the answer is that the interests of the nation as a whole are bound up in all grades of government in time of war as well as in time of peace, and that any serious curtailment of the functions of state and local governments would in a short time be felt as a veritable disaster. Without attempting to discuss this matter in all its ramifications, the following suggestions are offered:

A good illustration seems to be the schools. Schools are essential to democracy during war as well as in peace. Practically everywhere, however, in the United States the school revenues are derived from the direct tax on property. This source of revenue would be attacked by a federal direct tax.

In England and still more so in France the schools at the beginning of the war were allowed to be crippled. Male teachers went into the ranks and female teachers into other lines of war work, while school buildings were taken for war purposes. Both countries, however, soon awoke to the fact that it was dangerous to lessen the education of the rising generation. A boy of thirteen becomes an available fighting man in five years; an intelligent man makes a better soldier than an ignorant one. Moreover, the schools are necessary to the permanent maintenance of a high grade of civilization—the very thing for which we have been fighting. Hence both England and France soon made strenuous efforts to restore the school system. President Wilson himself also urged the continued maintenance of the schools during the stress of war. The schools unavoidably suffer from the proper

and necessary draft on the teaching force by the enrollment of the younger teachers in war work. Their revenues should, however, not be curtailed unless in the last extremity.

Other state and local activities may not be quite so vital. But roads and streets are essential to the production and distribution of food and other necessities. The upkeep of the departments of health is necessary to maintain physical efficiency. Police and fire protection, justice and the courts, are needed in war as much as in peace.

It is doubtless true that some economies can be made in state and local expenditures in war time. But the federal government should drain its own resources to the uttermost before it taps the sources of revenue of the states and cities. The maintenance of state and local activities is as essential to sound democracy during the war as after the war.

Administrative difficulties. Another objection to the use of federal property taxes in war time is to be found in the difficulties of administration. The assessment and collection of such taxes would have to be handled either through the existing administrative machinery of the state and local governments or by a newly created federal organization. If the states should administer the tax there would be the utmost lack of uniformity, resulting in gross inequality as between different parts of the country. It is well known that the states have made anything but a success in the administration of the property tax. If, on the other hand, the federal government should undertake to build up an organization for administering the property tax, several objections at once occur. In the first place, it is doubtful whether the federal government would succeed any better than the states have done. There are indeed some considerations which would favor the efficiency of a national administration: for instance, the various interstate complications, which are a thorn in the side of the state property tax, would largely be removed. On the other hand, the valuation of land and property so peculiarly requires minute local knowledge that the national administration would contend against a serious handicap from the start. Furthermore, whatever might be hoped from a perfected federal assessment machine, there is no reason to suppose that such a machine could be built up and function successfully in time to make its results of vital importance in the financing of the war.

Conclusion. In the foregoing arguments, land and other

capital taxes have been treated together under the general head of property taxes. It has not seemed necessary to examine the arguments separately with respect to taxes upon land or other special kinds of capital. The argument for a tax upon land alone would gain strength from the fact that the difficulties of assessment are less than in the case of many other kinds of capital. On the other hand, it would be difficult to defend the injustice of thus singling out a particular form of capital for special war burdens, above all as land is among the few kinds of property which except in certain specially proved localities have not shared in the general rise of prices resulting from the war.[1]

In conclusion, it appears that the logic is against the use by the federal government of taxes upon land or other forms of capital as a war measure. It is indeed conceivable that as a last resort the government, reaching out for every possible source of revenue, might obtain a considerable income from taxes on property. The United States, however, was far from reaching any such extremity during the war. Enormous revenues were obtained from sources better fitted to the exigencies of the situation, and the possibilities of these and other similar taxes had by no means been exhausted. As a war measure there is every reason to reject the federal taxation of land and capital.

II. Property Taxes after the War as a Means of Paying the War Debt

The second question to be investigated has to deal with the possible imposition of land or capital taxes or a "capital levy" after the war as a means of raising funds to extinguish or to reduce the war debt. The traditional policy of America has favored the prompt payment of war debts. Among the many financial problems facing the nation after the Revolution, that of making provision for the speedy extinction of the national debt was generally recognized as especially urgent. After some vicissitudes, the Revolutionary debt, increased by that of the War of 1812, was practically paid off in 1835. In like manner, after the Civil War the country set to work at once to reduce the three billion dollar war debt, a stupendous amount for those times, and within a generation the debt had been more than two-thirds paid. Had it not been for the unfortunate relation between the public

[1] As to this point see the discussion below in the section devoted to the fiscal aspects of bank credit and the currency.

debt and the national banking system, it is quite conceivable that this policy might have proceeded to the complete extinction of the national debt before the outbreak of the present war. There is every reason to believe that American public opinion will, immediately after the close of the present war, demand energetic measures looking toward the immediate reduction of the public debt and its ultimate disappearance within a reasonable time. This sentiment is supported by sound economic principles, which it is unnecessary to state at length.

For the payment of the public debt taxation is the means upon which the country must rely, and for some years after the present war the nation must expect to bear a heavy burden of taxation in order to meet interest on the debt and to provide for its speedy reduction.

The main question before us may conveniently be divided into two parts, of which the first is this: in the federal tax system of the generation following the war, shall reliance be placed upon the sources already in use, or shall new taxes on land or other forms of capital be added?

1. Property taxes as part of the regular federal tax system

The discussion of this problem involves the same line of argument as that which has already been presented in considering the problem of the immediate use of land and capital taxes as a war measure, with the exception that considerations based on the necessity of immediate action disappear. The problem could be considered after the war deliberately and in all its aspects. On the other hand, the arguments against such taxation based upon the evil effects of invading the tax field of the states and local governments and upon the administrative difficulties thereof remain with well-nigh undiminished force. Although the weight of the argument is distinctly against such taxes, we are not prepared to advance so unqualified an opinion against the future desirability of federal land and capital taxes, as we are with regard to their use as a war measure. We believe that the practical consideration of this problem should properly be deferred until after the resumption of normal conditions. It might be advisable for the American Economic Association to conduct later a thorough study of this question with a view to securing the data necessary for the expression of an authoritative opinion at such time as the matter may come up for practical consideration. At

the present moment, however, we have not felt called upon to endeavor to go exhaustively into this question.

2. The capital levy

A second question relating to post-bellum finance which is at present attracting some attention, has to do with the advisability of imposing what may be called a capital levy as a means of redeeming the whole, or a considerable portion, of the war debt. So-called capital levies have been already imposed in Germany and Switzerland. The proposition has received serious consideration in Austria, France, and particularly in England, where it has attracted much notice in the economic and other journals and has received the attention of members of the government. While the subject has not thus far aroused much interest in the United States, it is altogether likely that it may come into prominence in connection with the discussion of post-bellum financial measures. The question, therefore, deserves consideration.

General character of the capital levy. Briefly stated, the plan of the capital levy involves an extraordinarily heavy imposition made once for all, laid either upon all kinds of capital or upon certain specified kinds. The capital levy is to be distinguished from a property tax on the ground that it is a single levy imposed once for all (though possibly paid in instalments) and of an amount too great to be paid conveniently from current income or borne as an annually recurring tax. Examples are to be found in Germany, as in the case of the *Wehrbeitrag* of 1913 and the *Kriegsteuer* of 1916 with the amendment of 1917, and in Switzerland, where a national property tax was levied in 1913. Strictly speaking, these taxes were not heavy enough to deserve the title of capital levy, and moreover in the case of Germany the promise of non-recurrence has not been kept. However, responsible German writers have expressed the opinion that great use must be made of the capital levy in solving Germany's financial problem after the war.

On account of the obvious injustice of singling out certain kinds of capital for such heavy exaction we are justified in considering only the general levy upon practically all forms of capital. In collecting the tax the government would presumably accept not only payments in money, but payments in government bonds and possibly in certain corporate securities. Bonds so received would be cancelled forthwith and corporate securities would

either be held by the government in order to obtain control of national industries and to use the profits therefrom for liquidation of the public debt, or else would be exchanged with the citizens for government bonds, which would then be cancelled. Such a capital levy, equal in amount to the entire public debt, would, on the assumption that the corporate securities received were sold or exchanged for government bonds, obviously result in the cancellation at one stroke of the entire public debt. The slate would be wiped clean, the government would be relieved of further interest charge, the annually recurring taxes could be greatly reduced, and business could proceed without the necessity of further heavy taxation in order to defray the burdens of the past war. A smaller exaction would realize these results in part.

Discussion limited to the fiscal problem. In the discussion of this project, arguments have been offered in its favor based upon the desire to secure a different distribution of wealth or an increased control of industry by the government. Advocates of the single tax would also approve of such a levy if it should tend to result in government ownership of the land. Inasmuch as these are all large social questions we feel that it is out of the question to give them adequate study and to present positive conclusions in the time at our disposal. In fact, there is reason to doubt whether these questions are properly before a special war finance committee. We believe it best, therefore, to devote our inquiries solely to the fiscal considerations involved.

The capital levy vs. repudiation. The weightiest fiscal argument urged in its favor is that the capital levy offers a way of escape to a nation facing otherwise the necessity of repudiation of its public debt. In other words, a capital levy is better than repudiation. As to this, there would seem to be little question. Repudiation puts the whole burden upon those who have subscribed for the public debt. Such an act, flagrantly unjust at any time, would be particularly unworthy of a government which had made such extensive use of the appeal to patriotism in soliciting subscriptions to war bonds as has been done by the United States in this war. Repudiation is, of course, also a disastrous blow to national credit and an admission of fiscal collapse. Without going further into the argument, the mere fact that the capital levy presumes to place the burden upon all capital and does not single out the holders of government bonds establishes its superiority over repudiation. These arguments, however, are really beside

the point so far as the United States is concerned. Whether or not other nations, strained to the breaking point by the burdens of war, may see repudiation staring them in the face, the United States is certainly in no such position. Our ability to pay interest on our war debt and to redeem the principal by means of orderly financial measures is unquestioned.

As war insurance. A similar argument is to the effect that a capital levy for extinguishing the past public debt is advisable as an insurance measure against possible future war. By submitting to this levy, the argument runs, the nation would be financially prepared for further struggles, should they be necessary. This argument is inapplicable to the United States for the reasons given above. Unless a nation is really bankrupt, a heavy capital levy would be the worst possible preparation for future war, and the United States has not begun to approach the point where such action would be a necessity.

To prevent evasion of income taxes. The capital levy has been advocated in order to provide a means of reaching those citizens who seek to evade income taxes by investing their wealth in forms of capital which are temporarily unproductive. Undoubtedly the capital levy would impose a heavy burden upon such evaders, but it is a burden which would fall alike upon the just and the unjust. This alone is enough to render the capital levy unendurably obnoxious even though there is a possibility that the process of capitalization might mitigate to some degree the injustice done to the innocent owner of unproductive property who bought previous to the war without thought of tax evasion. To be most effective as a punitive measure and most successful as a deterrent, the capital levy should be closely synchronized with the income tax, *i. e.*, the levy should be imposed when the change is made in the income-tax rates from the war level to a lower level. Of course if income-tax rates were to remain high for a generation or two, there would be no excuse for a capital levy to punish or to prevent evasion. This fact might form the basis for an argument of some importance in favor of maintaining a high level of income-tax rates for a considerable period following the war. There is, therefore, some force to the contention that the capital levy would prevent evasion, but it is doubtful if it is as strong as it appears to its advocates, and it is apparent that there is not enough of merit in this argument to offset the extraordinary practical difficulties in the way of the imposition of the capital levy to which we shall now call attention.

Administrative difficulties. All the administrative difficulties inherent in the federal property tax as already discussed would be present to an intensified degree in connection with the capital levy. The great difficulty with all property taxes lies in the discovery and valuation of property. These difficulties have been the main cause of the break-down of the American property tax and it is essential to point out that these difficulties grow, and at an increasing rate, with the weight of the tax. There is reason to believe that some European countries have made a success of certain forms of property tax where the rates have been very low. Undoubtedly one of the reasons for the failure of the American property tax is to be found in the high rates at which it is imposed. But even the ordinary rates of the American property tax would appear insignificant when compared with the rates at which a single capital levy would have to be imposed in order to raise funds to pay off the whole or a great part of the public debt. The inequalities and injustices notoriously resulting from such property taxes as are now levied by our states and local subdivisions would be grossly intensified, the motive to evasion would be irresistible, and the difficulties of assessment overwhelming. Furthermore, the character of the capital levy as a single exaction once for all would intensify its inequality and injustice. The burden of the regularly recurring property tax, whatever its evils, tends to be softened by the very fact of its regularity. Taxes are capitalized; allowance is made for the inequality of tax burdens upon different kinds of property; and in the course of years some of the rough edges are worn off. Nothing of the sort would be possible in the case of the once-for-all capital levy, which would descend with crushing burden and cruel inequality.

Effect upon business. To determine the comparative effects upon business of continued heavy taxes along present lines and the once-for-all capital levy is a difficult problem. Without doubt, relief from the burden of heavy future taxes would be a boon to business. On the other hand, there is little reason to doubt that many business men and corporations would be unable to endure the sudden burden of the capital levy after the war. That the burden would fall unequally and with much injustice does not strengthen the argument for the capital levy. In the years immediately following the war, business will have to pass through a readjustment, the character and seriousness of which can not now be foreseen. The sudden imposition of a heavy capital levy at this time might prove a disastrous blow.

The constitutional question is the same as that which has been discussed above. Unless by some legal quibble the capital levy were to be defined as something other than a direct tax, which seems altogether unlikely, it would under our present constitutional rule have to be imposed in proportion to the population of the states. This would cause such gross injustice and so greatly limit the possible amount to be raised as to preclude the capital levy from serious discussion. If the capital levy is to be used, the constitution must first be amended. The argument based upon the time required for amendment, however, is here of little weight. If it should be decided, on the merits of the case, that the capital levy was advisable, this particular difficulty could probably be adjusted by an amendment to the constitution.

Penalty upon saving. Against the capital levy it may further be urged that it would be a penalty upon saving. This argument would perhaps have little force if there were any way in which the public could be guaranteed against a repetition. Obviously there is no possibility of such a guarantee, and the very fact of resort to such a levy for the first time in the history of the nation would certainly arouse fear as to the future.

Effect upon other taxes. The capital levy, in so far as it would tend to reduce capital in the hands of the citizens, or to diminish its productivity, would have a tendency to impair the base upon which the present tax system rests. In particular, the income tax, at present the mainstay of the national tax system, would be likely to suffer.

Effect upon public expenditure. An interesting and important phase of the capital levy is its probable effect on public expenditure. The ever-present tendency toward extravagance is apt to be particularly strong in the years following a costly war. One of the few favorable considerations that can be urged for the burden of interest which our government must shoulder after the war is that the heavy taxes necessary for its payment will tend to curb extravagance in other lines. Extinction of the debt by means of the capital levy would remove this check, and it is not improbable that the promised reduction in future taxes, for which the capital levy was the price, would be forthcoming only in part.

Relation to tax-exempt liberty bonds. Finally, there is a consideration which, of itself, would seem to make the capital levy practically impossible in the United States. All of the present war debt has been issued with the explicit promise of exemption

from all taxation, excepting estate or inheritance taxes, upon the principal of the bonds. Apparently, therefore, there is no way in which the capital levy can be imposed upon capital in the form of liberty bonds except by what would amount to a virtual repudiation of the government's contract with the lenders. To impose a capital levy from which holders of government bonds would be exempt in order to obtain funds for the immediate payment of those bonds would be a procedure so unjust as to preclude its consideration by serious and fair-minded students and to make its adoption politically impossible in the face of the popular wave of protest which it would arouse. It will be remembered that during the generation following the Civil War widespread popular feeling was aroused against the holders of government bonds on account of their favored position due to the exemption of their securities even from the ordinary tax levies, an exemption to which they were entitled by their contract and which was clearly foreseen at the time of the creation of the debt. It is quite possible that some such feeling may arise in the immediate future in connection with the tax-exempt feature of the liberty bonds of the present war. If, however, the government should proceed to impose a capital levy, granting an enormous and unforeseen advantage to bondholders, the popular cry of indignation can scarcely be imagined. This fact alone would appear on its face to be sufficient to settle the question.

Conclusion. It is realized that the foregoing analysis is far from exhaustive, but it reveals so many serious objections to the capital levy that we do not hesitate to report that in our opinion such a measure has no proper place in a financial plan for a country in the present position of the United States. As an alternative to repudiation in a country on the verge of bankruptcy, something can be said for the plan. For a nation solvent and unembarrassed, it possesses no attractions.

IV

PUBLIC CREDIT

1. *Introduction.* Public credit is a part of general credit. While it differs in several important respects from private credit, it is nevertheless subject to the same general conditions and limitations. Public credit, like private, is based in last analysis upon the confidence of creditors in the ability and the purpose of the debtor to fulfil his contract when it falls due. It implies in its very nature an appeal to trust and therefore rests, not upon coercion or the power of government, but rather upon the confidence of the citizens in the promises of the state.

The employment of credit by the modern state is not a war measure only, but is a normal incident in the fiscal practice of every nation. It performs a valuable service by bridging over the gap of a deficit between alternating periods of surplus revenues. In the case of a sudden emergency like war, with its immediate enormous demands, the function of credit is to make available for the government at once the financial resources of the country without waiting for the slower processes of taxation. But it must always be borne in mind that ordinarily the use of credit is simply to anticipate the later revenues from taxation or industrial undertakings. The determination to use public credit for any expenditure must assume the desirability of the expenditure itself. Given this, the choice is simply between the use of credit or of taxation.

In the case of the gigantic expenditures of the present war it is, however, scarcely correct to say that there was a choice between these two. It was necessary at the outset to make use of credit on a hitherto unknown scale. But at the same time, in accordance with the most approved financial practice of providing a sound basis for public credit, the scope of taxation was greatly extended. Both means of providing the necessary revenues have been employed. The unwisdom of too exclusive a dependence upon loans has been illustrated in the past fiscal history of the United States and in the experience of some of the

European nations in the present war. On the other hand, the impracticability of collecting by taxation alone the enormous sums called for by modern military expenditures is shown by the fact that neither England nor the United States has ventured to raise more than about a quarter of its war expenditures, inclusive of loans to Allies, by this method. The maintenance of credit upon a sound basis, however, as well as justice to future generations, demands that the revenues from taxation be increased so far as possible with the progress of the war. Upon this point the policy of the United States in the present war must be commended.

2. *Anticipatory loans.* A conspicuous feature of our war financing has been the large and continuous use of Treasury certificates of indebtedness issued in anticipation of the proceeds of the Liberty loans and, to a less extent, of income and excess-profits taxes. During the nineteen months of our direct participation in the war no less than thirty-one such issues were emitted to an aggregate nominal volume of $12,687,524,000. The war has thus been very largely financed, in so far as reliance has been had upon public credit, from the proceeds of certificates of indebtedness periodically funded into, or liquidated out of, the proceeds of funded loans.[1]

The use of short-term anticipatory borrowing at the outset of a period of extraordinary financing to supply ready funds until established sources of revenue become productive is a familiar and accredited expedient. But the habitual use of such a device to supply the Treasury with current funds was, at least in the experience of the United States, an unfamiliar and untested policy. The adoption and pursuit of this policy by the United States must be regarded as deliberate rather than inevitable. It would have been possible for the Treasury, at any stage of its war financing, by earlier recourse to funded borrowing or by the issue of large loans or by more frequent flotations, to have supplied itself with sufficient margin to have made anticipatory borrowing unnecessary.

As actually employed, the certificate method has been more costly than installment-payable loans to the extent that the certificates have borne higher rates of interest than the corresponding Liberty loans. It has necessitated the virtual

[1] For a detailed study of this matter, see Hollander, *War Borrowing: A Study of Treasury Certificates of Indebtedness of the United States.* (In press.)

renewal and extension of short-term loans in so far as the maturities of one cycle have overlapped the issues of another, with the ever-present possibility of embarrassment in refunding operations. But most important of all, it has taken the form, to a very large extent, of newly created credit advances made by the banks to the Treasury in the shape of government deposits and has thus added not a little to that inflation of credit which it has been the avowed policy of the Treasury to prevent.

3. *Technique of borrowing.* (*a*) *What form shall the public debt take?* The choice between temporary debts and long-time bonds was from the first resolved in favor of the latter, and the mistakes which characterized the policy of Secretary Chase in the Civil War were avoided. Warned by the enormous expenditures of the European belligerents and the possibility of a long continued struggle, the United States has issued no obligations—other than certificates of indebtedness just described and war savings stamps—for a shorter period than ten years from the date of issuance. There was thus avoided at least the danger that the debt would fall due during the continuance of the struggle itself.

Having decided upon bonds rather than upon short-term notes, the next problem which confronted the Treasury was the kind of bond to be issued. In conformity with American practice the Treasury rejected a bond running in perpetuity, like the French *rentes* issued during the present war, and chose instead one running for a limited term. But of securities of this description at least four presented themselves for consideration. These were annuities, serial bonds, optional bonds, and bonds for definite periods.

Annuities have not for over a century had any vogue in the United States and were not seriously considered in the present war. At least two weighty reasons for their rejection may be mentioned. Providing as they do for fixed annual payments during the life of the obligation, they are open to the objection that they preclude a refunding, by which advantage may be taken of every fall in the rate of interest. And in the second place, inasmuch as the government may be under the necessity of further borrowing during the life of the contract, it may be very inconvenient to make the annual payments on the principal.

Against the serial bonds essentially the same arguments may be directed. As these bonds are paid in series immediately after their creation, the machinery of a sinking fund is at once called

into existence for this purpose. This is entirely legitimate in the case of an investment loan for a productive enterprise, the earnings from which provide the fund out of which the debt may be liquidated; or in the case of regularly recurring expenditures of a state or municipality which will be defrayed out of subsequent tax revenues. Thus serial bonds may properly be used by an industrial corporation or by a state or local government. But for the national government they are ordinarily quite inadmissible. In the first place the purposes for which the national government uses its credit are generally of an emergency character, and not for productive investment. An agency which may have to finance a war cannot afford to have its hands tied by the falling due of a debt whose payment is compulsory. In this respect the effect of the serial bond is like that of the now discredited sinking-fund policy, in that it compels payment of the debt even when the government is borrowing. Secondly, the serial bond prevents more rapid payment when larger surplus revenues make such action possible. Finally it precludes the refunding of a debt at lower interest rates when these decline. The conclusion may therefore be drawn that serial bonds are not suitable for purposes of war finance by the national government.

The "optional" bond is an American device, introduced into this country by the act of February 25, 1862, providing for the issue of 500 million five-twenty bonds. These were redeemable after five, and payable after twenty, years from date. They derived their name from the double choice offered the government as to the time of payment. This form of bond has been the favored one in the present war. Certain objections may, notwithstanding, be cited against the optional bond. It is often urged that it is needlessly expensive, since a long-term bond can be sold at a higher price than one of shorter maturity bearing the same rate of interest—an advantage which is lost by the introduction of a short term after which it is redeemable. Moreover, the sacrifice thus made does not necessarily permit the government to avail itself of the earlier date. In the case of the five-twenties of 1862, the process of refunding at a lower rate of interest began about ten, and was completed about fourteen, years after the date of issue. A straight ten-year bond would have been preferable in this instance. The fixation of a final date of repayment offers no guarantee of payment of the debt, for it may be merely refunded. And, finally, it introduces an unnecessary element of complexity into the composition of the national debt.

On the other hand, certain merits of this form of bond may be mentioned. Perhaps the most conspicuous advantage is the fact that it furnishes an earnest of the intention of the government to attack the payment of the debt as promptly as possible. Such a notice would have a salutary effect upon the credit of the government. It gives an earlier control over the debt than would probably be secured by the issue of a straight long-term bond. permitting payment or refunding. The saving in interest thus effected might more than offset the loss from the lower selling price. Moreover, it is not necessarily true that investors always prefer a long-term bond; under certain circumstances they may prefer a short-term bond. In such a case the alleged advantage of the long-term bond over the optional bond would be illusory. The government obligation of long term has generally been preferred in past wars to one bearing the same rate of interest but maturing in a shorter time, because the bonds have usually been issued during a period of impaired credit and consequently at a high rate of interest. After the emergency has passed, with the improvement of the government's credit the bonds have risen above par. In such a case the longer the bond had to run, the greater would be its value. If, on the other hand, the bond is likely to remain below par after the government has ceased borrowing, the short-term obligation would be preferred. This would be especially true if the interest rate on the bonds were lower than the market rate for good securities, as the investor would then prefer to have his capital released for investment in more lucrative undertakings. Such seems to be the case in the United States in the present war.

The fourth kind of bond which presented itself for selection by the Treasury was the straight bond for a definite period such as ten, twenty or thirty years. The advantages of this form of obligation are its simplicity; the possibility of arranging their terms of maturity so as to have them mature, like bankers' paper, at dates convenient for payment or refunding; finally, the higher price obtainable as compared with either of the two former kinds, because of the certainty enjoyed by the creditor that his investment will not be disturbed for a definite period—an advantage which, as has been pointed out, has not been true of the present war, whatever may have been the case in the past. On the other hand, it has the disadvantage that the bonds fall due in one large block, which necessitates refunding. The accumulation of

a fund in advance to provide for their payment, either by a sinking fund or by some other device, is neither advisable nor likely. In the main, therefore, no serious criticism can be urged against the choice by the Treasury of both the optional and the straight bonds, with a preference on the whole for the former category.

The present war has seen the introduction of another credit device in the war saving and thrift stamps. Copied after the English model, they were introduced into the United States in December, 1917, and have since been productive of large returns, amounting by November 2, 1918, to $532,520,230. The advantages of this form of obligation are several. Their low denomination brings them within the purchasing power of even the lowest income classes. Since they are on sale at all times, they provide a steady, and by no means insignificant, stream of revenue. They also tend to exert a powerful influence upon the habits of thrift and of capital formation on the part of the people. As they have generally been purchased in small sums and for cash, they have been bought out of savings. There has thus been effected a real transfer of services and commodities from civilian consumption to government use. At the same time, the inflation which has followed the flotation of government loans has been avoided. An exception to the general rule seems to have occurred where particular efforts were made to secure thousand-dollar subscriptions to war saving stamps.

(*b*) *Rate of interest.* The bonds thus far issued in the present war have been emitted at par. As the rate of interest and the term were both stated in the bond, the difficult problem was presented of fixing the rate of interest at a point which would render the obligation an attractive investment and yet secure for the government the needed funds at as cheap a price as possible. Under the circumstances the market rate for a bond of this character must be hit with precision. For the bonds of the first issue the rate of three and a half per cent was fixed, but they were exempt from taxation. Subsequent issues were denied this privilege in part, but as an offset the rate of interest was raised to four and then to four and a quarter per cent.

Several questions suggest themselves at this point. Did the government avail itself of the patriotism of its citizens to secure a rate lower than the ordinary commercial one? About this there seems to be no doubt. The conditions under which loan "drives" have been made in some cases brought a moral pres-

sure to bear upon prospective buyers to purchase, or upon subsequent owners to refrain from selling, which has amounted almost to compulsion. Moreover the bonds of all issues have sold below par, on the market. Patriotism might induce large subscriptions to bonds bearing an unduly low rate of interest, but would scarcely be able to support the price when the process of redistributing on the exchange took place.

The "patriotic" loan has been a unique feature of the present war. The amount of bonds to be floated has been so great and the needs of the government have been so urgent that the return on his investment has not always been the deciding factor with the purchaser. At the same time the government has employed the credit machinery and the mechanism of the money market placed at its disposal through the Federal Reserve banks to market its loans at as low a rate of interest as possible. Discount rates and preference rates on loans for the purchase of Liberty bonds have been so shaped as to permit the marketing of bonds at practically any rate the Treasury selected.[1] A low rate of interest having been viewed as one of the most desirable features of the bond issues, every device has been utilized to secure this result.

This raises another question, as to whether the Treasury has, by its own act, sustained the price of the bonds. The third Liberty bond act, of April 4, 1918, provided for a bond-purchase fund and authorized the Secretary of the Treasury, until one year after the termination of the war, to purchase bonds on the market, not to exceed in any one year one-twentieth of the amount issued. As the third Liberty loan amounted to four billions, this provision would permit the purchase of 200 millions of bonds a year. During the six months which elapsed between the third and fourth loans the Secretary of the Treasury made considerable use of this power and bought bonds on the open market. We learn from the annual report of the Secretary that up to November 1, 1918, the Treasury purchased over 244 millions of such bonds, about 172½ millions of the second loan, about 71 millions of the third loan, and $656,000 of the first loan converted. This action undoubtedly exercised a beneficial effect upon the price of the outstanding issues. The propriety of using the proceeds of the loan for this purpose may, however, be raised at this point. As

[1] See further below, the section of this report on the Fiscal Aspects of Bank Credit and Currency, pp. 91-92, 109-110.

a measure of debt redemption it may be justified on the ground that the government, even though it was still in the market as a borrower, was buying its old bonds at a discount while it planned to sell new ones, bearing the same rate of interest, at par. As a method of maintaining, or endeavoring to raise, the market price to an artificially high price it is open to objections. But as a means of preventing a sudden or violent decline, whether accidental or engineered by speculators, an authorization of this sort is probably desirable. The English Exchequer has had the same power conferred on it by Parliament. Obviously it ought to be employed with the greatest possible care; and the large use made of this expedient by the Treasury is in no small measure due to the low rate of interest of the loans.

A loan policy which should utilize the patriotic fervor of a people, stimulated by the contagious enthusiasm of a loan "drive", and then attempt to maintain an artificial price by manipulating the market, in order to sell bonds at an unduly low rate of interest, would be open to severe criticism. Assuming that such a policy were possible, the bad effects would at once become apparent upon the return of peace when government support would be withdrawn as no longer necessary. The price of the bonds might then fall to normal levels and an undeserved loss be inflicted upon such holders as might be compelled to sell them before maturity. After the Civil War the use of the national bonds as a basis for bank-note circulation long gave them an artificial value, but that support will probably be lacking for the Liberty bonds after the present war and the price will be a normal one. Such a procedure, if pursued by a government, would undoubtedly affect its credit when it next appeared as borrower upon the money market.

The effect of offering unduly low rates of interest upon saving and capital formation should also be considered. It is doubtful whether even very high rates of interest would induce sufficient saving to create a fund adequate for meeting war expenditures. It is certain that the offer of low rates of interest, even with the added appeal to patriotism, would not suffice to attract savings of sufficient volume to finance the war. The conclusion is inevitable that the diversion of income from ordinary uses to government needs calls for the general and heavy taxation of consumption goods. Compulsory saving must supplement the economic appeal to thrift and industry.

Conclusions drawn from the analogies of previous wars, however, must be used with caution in this connection, for the ordinary principles of supply and demand have not been permitted to work themselves out in the present war. The control of production and of industry, price control and other methods have affected a compulsory diversion of capital from ordinary uses to government service which has modified the operation of normal economic forces.

(*c*) *Term*. Allusion has already been made to the use of optional or double-term bonds. Three out of the four Liberty loans were of this description. The dates of issue and maturity are shown in the following table:

No.	*Date of Issue*	*Amount Accepted*	*Interest*	*Redeemable*	*Payable*
1.	June 15, 1917	$2,000,000,000	3-½%	1932	1947
2.	Nov. 15, 1917	$3,808,766,150	4 %	1927	1942
3.	May 9, 1918	$4,176,576,850	4-¼%		1928
4.	Oct. 24, 1918	$6,989,047,000	4-¼%	1933	1938

The shortening of the term from a 15-30 year bond for the first loan to a 10-25 year bond for the second was in accordance with a policy of beginning with a long-term obligation and of shortening the period of non-payment at each successive issue. By the time the third loan was to be floated, however, the optional bond was discarded in favor of a straight ten-year obligation. The fourth loan saw a reversal both in the form of the bond—the optional one again being selected—and also in the length of the term—the period of non-payment being lengthened from ten years to fifteen. These changes reflect the varying conditions of the market, and were made upon distinct representations by the bankers through whom the greater part of the work of floating the issues would have to be done.

As the dates now stand, the present debt is not well arranged for a policy of energetic debt payment to be undertaken immediately after the war. Of the seventeen billions of bonds, about eight billions in round numbers will become redeemable in 1927-1928, and the remaining nine billions in 1932-1933. The final date at which the bond of longest date falls due is 1947. But of this total amount of debt over seven billions have been advanced to the Allies. Assuming that this will be liquidated by them, the net debt to be paid by the United States was in November 1918 about ten billions. This will probably increase to over fifteen

billions before the end of the fiscal year. If the American people will submit to the continuance of taxation for debt purposes in the amount of about one and a half billion dollars a year this enormous sum could be expunged by 1947 when the last bonds fall due. This would be an achievement unparalleled in the financial annals of the world.

The question still remains as to the wisdom of establishing the minimum period of non-payment for as long a period as ten years. The best time to begin the payment of a debt is immediately after the conclusion of peace, when the revenues from taxation are large and industry is adjusted to the war taxes, and when expenditures for war have stopped. In the case of the Liberty loans ten years must elapse before the first one now outstanding becomes redeemable. The Treasury has indeed announced that a fifth loan will be floated in the spring and that this will consist of short-term bonds running for three, five and eight years. If this is done the unduly long period of non-payment in the present bonds will be corrected and the debt will be brought under the earlier control of the Treasury, thus permitting redemption to begin at a reasonably early period.

The purpose in arranging different terms for successive issues of bonds is to have them fall due at different times convenient for payment or refunding. If the original plan of the Treasury had been consistently pursued, the last bonds issued would have been for a short term and have lent themselves more perfectly to a policy of speedy repayment. But the success of such a policy depends of course upon the length of the war and the number of loans issues, as well as upon other factors.

In any case the Treasury may purchase its own debt in the open market and then cancel it. This method applied to the Civil War debt resulted in driving the price of the bonds up to unprecedented heights. During the single year 1888 it cost 112 millions to buy 94 millions of bonds not yet due. It is doubtful, however, whether a similar action at the present time would have the same results, at least under the existing income and excess-profits taxes. It may therefore be assumed that in spite of the fact that the earliest date at which any of the present debt comes under the control of the Treasury is ten years, the actual process of debt payment will begin immediately after the Treasury withdraws from the market as a borrower. It is earnestly to be hoped that the policy of debt payment may be speedily initiated and vigorously prosecuted.

4. *Exemption from taxation.* The strongest argument in favor of exempting federal bonds from taxation is that they will sell at a higher sum and thus yield a greater return to the government. Why should the government tax its own securities, it is asked? In either case, so the argument runs, the aggregate sum will be the same. Although this may be true under normal conditions with proportional taxes, when the rate of taxation remains unchanged, not only is this argument without force under the conditions which have obtained in the present war, but the practice has resulted in injustice. Since a large part of the war revenues have been, and are being, obtained from highly progressive income taxes, the possession of tax-exempt bonds, bought before the rates were raised, has afforded an unfair advantage to the large income-tax-payer. Moreover, since the loan has been taken by recipients of small incomes as well as by those of large incomes the price has not been enhanced by the full amount of the exemptions granted and consequently the gain to the government from the lower interest rate will not be as great as the loss in revenues from the income tax. In the case of the first Liberty loan the bonds unfortunately run for 15-30 years, the longest of any of the issues. The original injustice will thus be perpetuated for an unduly long time. Happily, this discrimination has been largely, though not entirely, corrected in subsequent bond issues.

The purpose of the exemption was to make the bonds more attractive and thus to permit their floating at a lower rate of interest than would otherwise have been possible. If at any time they should fall below par, so it was argued, it would be possible by raising the rate of the normal income tax to bring up their value again. Such a method, however, was both uncertain and expensive. It was expensive because the demand for tax-exempt bonds is confined to those who would profit by this arrangement, and the amount to be floated successfully would depend upon the number of such persons. If the bonds are to be made attractive to the non-income-taxpayers, they must bear a higher interest rate than the other group would be willing to accept. Hence the saving in interest would not be as great as the remission in taxation. It is also an uncertain and clumsy procedure, for the Treasury cannot affect the marketability of the bonds as readily by the indirect method of changes in the rate of the income tax as it can by direct changes in the rate of interest. Moreover,

the policy of tax exemption, never entirely abandoned, has introduced a certain element of discrimination as between the different bond issues.

The same arguments may be adduced against the exemption from taxation of the income from state and municipal bonds. If these are exempt while federal bonds are taxed, a discrimination against the latter is introduced which makes it more difficult to sell them in competition with the former. In the present war, this difficulty was met by denying to local governments complete freedom in the use of their credit. By exempting state and municipal bonds, moreover, a particular class of capitalists is favored above all others. How valuable this privilege is, may be judged from the high market prices paid for bonds of these descriptions. But not merely is discrimination between classes in the community introduced. The exemption from taxation has raised the price of state and municipal bonds and has distinctly improved their credit. There is danger that after the war they may be lured, by the low rates at which they can borrow, into extravagant or unnecessary enterprises. In a period when economy in expenditures is particularly important, this is a dangerous possibility.

It has also been argued that for a government to tax the interest of its own promises to pay, after those obligations had been sold without the imposition of such a tax, is morally an impairment of the terms of the contract. In answer, it may be said that such a claim for exemption from all future taxation rests upon a misconception of the nature of the state, unless such exemption is specifically granted by the very act which provides for the issue of the bonds.

It has been accepted without argument that the decision of the Supreme Court in the case of Pollock *v.* The Farmers' Loan & Trust Company, in the income-tax decisions of 1895, still holds good. But in the meantime the constitution has been amended by the passage of the sixteenth amendment which grants Congress power "to lay and collect taxes on income from whatever source derived". No requirement for the exemption of income from state and local bonds is to be found in this amendment. Moreover, entirely apart from the power granted by the sixteenth amendment, it has been argued that the federal government has power to tax the net income from practically every source as part of a general income tax. On the other hand it is held by constitutional lawyers of high standing that the position

originally taken by the Supreme Court would hold to-day, even in the face of the latest amendment to the constitution. Where there is such diversity of opinion it is highly desirable from every point of view that the question of their exemption be again raised and that the Supreme Court be asked to pass upon it.

5. *Distribution of the bonds.* The Treasury's policy in its issue of the war loans has been threefold—to raise the requisite money, to place the bonds permanently, so far as might be practicable, and to avoid as far as possible placing them with the banks, the investment of whose funds in government securities would interfere with the free movement of credit. The question as to the influence of subscriptions made through money borrowed by subscribers at a bank stands on a somewhat different footing, in so far as the Treasury's policy has been to encourage, rather than discourage such action. Our general impression is that most of such borrowings have been of a temporary character—say three to nine months—and designed merely to anticipate income accruing during that period. But the practice nevertheless seems one to be deprecated.

The first purpose, that of raising the necessary funds, our government has more than achieved, as is shown by the over-subscription of every one of the four Liberty loans.[1] The second purpose, that of getting the bonds lodged permanently in the hands of the original subscribers, has been only partially successful, because the market price has invariably declined after the issue; that decline having extended at times to three or five per cent. This was proof that some subscribers either desired to realize on their bonds, or were compelled to do so. On the other hand, the depreciation has been comparatively small except at times when the war news was so unfavorable as to indicate a long continuance of the struggle. This would suggest that the need of subscribers to turn their bonds into cash was not urgent. As for the third purpose, that of avoiding direct subscriptions by the banks, information from the Treasury and other sources indicates that the banks were comparatively light subscribers on their own account to the

[1] This is shown in the following table:

No.	*Amount asked for*	*Subscriptions*	*No. of subscribers*
1.	$2,000,000,000	$3,035,226,850	4,000,000
2.	$3,000,000,000	$4,617,532,300	9,420,000
3.	$3,000,000,000	$4,176,516,830	17,000,000
4.	$6,000,000,000	$6,989,047,000	21,000,000

first loan, that they subscribed in much more considerable proportion to the second and third loans, but that in the fourth loan nothwithstanding the very much greater total they were a less important contributor than in the preceding loan.

It is difficult to discriminate between rediscounts by the Federal Reserve for other banks, on collateral consisting of Liberty bonds, and rediscounts on collateral consisting of short-term certificates of indebtedness. The Federal Reserve statements are therefore no fair indication of the bank holdings of the war loans. On October 25th, however, the Federal Reserve Board reported holdings by member banks of United States bonds, including Liberty bonds and not including certificates of indebtedness, at $1,018,-439,000, as against $592,695,000 on May 24th when the previous loan had just been placed. In other words, there had been a substantial increase of such holdings. Since approximately ten billions Liberty bonds were actually outstanding at the October date, the banks apparently held slightly over one-tenth. The statement referred to, however, did not cover all banks, but only those which were members of the Federal Reserve. There is no doubt, nevertheless, that recourse to the banks on even this scale, however necessary, has been a weakness in the government's war financing, especially if we add to the above figures the large amount of loans collateraled by the bonds and the certificates of indebtedness.

It is impossible to say how many of the outstanding war bonds are held permanently. The banks will naturally dispose of their own holdings at the earliest opportunity. Savings banks and life-insurance companies would to a large extent do the same, provided the price of such bonds were to rise to a point where the invested principal should be recoverable. At the present time they could reinvest their funds at a much higher interest rate in perfectly sound investment securities outside of government bonds. The same argument may apply in the case of individuals, and its resultant effect would naturally be to restrain recovery in price for the war bonds.

This failure of an advance in response to returning peace is usually the immediate sequel to every great war; whence the familiar phenomenon of a decline or stationary price for war loans during several years after such a war is over. Our own Civil War ended in 1865, but it was not until 1870 that United States bonds crossed the high price of 1864. It was two years

after the battle of Waterloo in 1815 before British consols recovered their price of 1814.

The working-out of this process always depends first on the actual yield of the war bonds themselves—that is to say, how far that yield is in line with actual market value of capital—and second on the subsequent rise or fall in the market price for other high-grade securities at the time when government bonds were not moving with them.

In some respects the most important task ahead of the Treasury is to accustom the American people as a whole to individual investment in government bonds. Until this war they had for nearly half a century been unaccustomed to such investment, for the reason that the "circulation privilege" then in vogue, which was regulated by holdings of United States bonds by the note-issuing banks, caused the banks to bid such prices for United States bonds, old or new, as made them all but non-remunerative as income-producers to the ordinary investor. To what extent further issues of United States bonds will make this appeal to the average investor at the present rate of interest paid upon them, is a question which the markets themselves will have to test.

V

FISCAL ASPECTS OF BANK CREDIT AND CURRENCY

The banking and currency system of the United States had, from the beginning of the European war, an important relationship to fiscal conditions. It was largely by reason of the fact that our banking system had been reorganized and placed upon a stable basis that we were able, during the early days of the war, to provide for financing the process of reorganizing industry when necessary to meet the requirements of foreign buyers. When the United States itself became a belligerent it was plain from the outset that our newly organized banking system would be called upon to adopt a policy which would be effective in enabling the Treasury department to finance the war.

The form in which the first demands upon the banking system were made evident was an issue of short-term certificates which were placed with the Federal Reserve banks. Not long after this preliminary advance had been made Congress adopted the first Liberty Loan Act which incidentally authorized the Secretary of the Treasury to sell short-term certificates of indebtedness running not to exceed ninety days. The Secretary of the Treasury had already designated the Federal Reserve banks as fiscal agents of the government and under their general leadership an organization designed for the purpose of selling Liberty bonds to investors was in process of development. The sale of Liberty bonds, however, necessarily proved to be slow, and in the meantime the very heavy demands of the government made in connection with its war preparations, and with the financing of the foreign governments allied with it, had to be met.

One method determined upon for meeting such requirements was that of placing with the banks of the country short-term certificates of indebtedness which were subsequently to be funded into Liberty bonds. The banks were expected to purchase, to pay for and if necessary to hold these certificates up to the time when definite subscriptions by investors became available. The certificates were then paid off and the bonds took their places, the

banks being thus relieved of the advances which they had made and reimbursed out of the proceeds of the bond sales. As the war advanced, it became necessary to obtain funds with almost absolute certainty and regularity, and in consequence the plan was developed of calling upon the banks for the use of a certain percentage of their current assets in taking up the certificates. Still later, this percentage was increased, while the certificate sales became more numerous, eventually reaching a semi-monthly basis. Inasmuch as the proceeds of a Liberty loan were usually but little more than sufficient to pay off the previously issued certificates, the sales of certificates became practically a continuous process, so that the banks were constantly called upon to carry a continuing load of short-term Treasury obligations.

In effect, this method of finance required the investment of a certain proportion of bank resources in government obligations. Such obligations were paid for by marking up on the books of the banks a corresponding amount in deposit credits without reserve requirement, these deposits being subsequently transferred as the requirements of the government demanded. Eventually the banks which were called upon to pay these deposits received in most cases an equivalent amount of other deposits from their regular customers so that the net effect was an addition of deposit credit on the books of the banks of the country, notwithstanding that such credit did not necessarily represent a corresponding amount of liquid wealth.

From the very first the rate of interest to be fixed upon the short-term certificates was of fundamental importance, and the significance of this rate became more and more evident as time went on. Almost from the beginning it was plain that the Federal Reserve banks would be called upon to carry the load of public financing at critical moments, because of the fact that the banks could not in most cases subscribe as promptly as the Treasury desired them to do, unless the Reserve banks stood ready to relieve them by discounting their paper. In this connection, too, it was thought desirable that the rate to be charged by Federal Reserve banks must not exceed the rate fixed by the Treasury department upon certificates of indebtedness. Had the rate been higher the result would have been to impose upon the banks, which offered for rediscount customers' paper secured by certificates, a penalty equal to the difference between the rates paid by the Treasury and those of the Reserve banks. The first

development of a discount policy on the part of the Reserve authorities was therefore that of permitting the direct rediscount of obligations secured by government bonds or certificates or indebtedness at the coupon rate. This policy was greatly broadened by admitting to Reserve banks the obligations of nonmember banks which were given practically the same status as those of members. As more Liberty loans were offered upon the market the Treasury gradually raised the coupon rate, but never raised it to a point corresponding to the market rate as was suggested by the fact that each of the issues of bonds fell considerably below par as soon as it became subject to dealings in the open market. The certificates of indebtedness, being composed of short maturities and being held chiefly by the banks, did not suffer a corresponding depreciation, but they bore a fixed relationship in their rate to that which was established for the long-term bonds.

To sum up this process of financing, therefore, we may say that it amounted to placing in the hands of the banks a great volume of public obligations which they held and carried continuously, such obligations bearing a rate materially below the market rate. We may say, however, that in consequence of this situation and of the close reliance of the banks upon the Reserve banks (because of the concentration of reserves in the hands of the latter), it was never possible for the Reserve banks to raise their rates of rediscount above the coupon rates of the certificates and Liberty bonds. This was a condition of affairs in which only absolute co-operation on the part of the public in taking out of the hands of the banks the entire output of certificates and bonds could have availed to prevent undue expansion of bank credits.

This summary of the case, it appears to the committee, is sufficient to show the existence of an important connection between currency and credit conditions and the government's fiscal operations, as well as the effect of the government's operations on those conditions. But these currency and credit conditions necessarily had a wider scope of influence, affecting the finances of the government not only directly, but also indirectly through their influence upon the financial and industrial position of the country at large. As to this broader question the committee presents the following facts, on the interpretation of which the general conclusions as to cause and effect in the field of banking, indus-

trial markets, and prices of commodities will necessarily depend.

The manifestation of the effects of war-time financing, aside from the taxation, which makes itself most evident to the public, is twofold: (1) changes in the volume of the currency and banking credit of the country and (2) changes in the price level. It is therefore necessary first of all to ascertain what changes in these particulars have taken place.

Physical Volume of Business 1913-1917 [1]

In this connection the first problem is to measure in some way the growth of trade needs since 1913. This cannot be done with any high degree of accuracy, but a rough approximation can be reached through the study of certain statistics which typify business activity and growth. Obviously the statistics used for this purpose should be statistics of physical quantities and not of values involving prices.

The items chosen should be important ones which are reasonable indices of either business activity and growth in general, or of business activity and growth in important branches of industry. Among the best items for measuring the movement of business in general, because they are items that enter into so many products, are the production of pig iron, bituminous coal, anthracite coal, petroleum, copper and silver. Other good indices of general business are the number of tons of freight carried on important railroads and the tonnage of vessels entered and cleared at American ports. Representative of the building industry is the number of building permits given in leading cities. Here are twelve items any one of which is an honest witness of the growth of American business, but each of which has its own bias. Safer than to trust any one of them is to take the testimony of all, so that in the mouths of many witnesses the truth may be established. If we reduce the figures for each of these twelve

[1] In preparing the following pages which deal with changes in banking credit, currency and prices, growing out of the war, use has been made of an article written by Professor E. W. Kemmerer and published in the *American Economic Review* for June, 1918. The statistical work follows substantially the lines laid down in the paper referred to, the figures, however, being brought up to date, condensed, and in some cases altered. There are differences of opinion with reference to the validity of certain of the statistics used, and the committee recognizes that the banking changes of the past few years render the figures in some particulars non-comparable. Nevertheless, the general results indicating banking credit and currency conditions are so obvious in their nature that it is believed there can be little doubt concerning the general character of the conclusions.

items to a percentage basis, taking as 100 the figure for the calendar year 1913, and if we then combine these percentage figures into a simple average we arrive at a series of index numbers, which should represent in a rough way the growth of business in general. Such computations give the result shown in the following table:

GROWTH OF BUSINESS 1913-1917 [1]

1913	100
1914	99
1915	103
1916	107
1917	112

Aside from the slight decline in the year 1914 when the war broke out, the figures show a moderate growth of business each year from 1913 to 1917. Comparing the year 1913 with 1917, we find a business growth of twelve per cent.

Money in Circulation

Our next inquiry concerns itself with the volume of money in circulation each year throughout this period.

The term "money in circulation" is one subject to several different interpretations, but here it will be used to cover all the money in the country, except that held in the federal treasury, and that held by federal reserve banks and federal reserve agents as reserve against outstanding federal reserve notes.[2] In order

[1] In computing the items in the table given above, the figure used for anthracite coal is that representing the number of tons carried to tide water. The figure for copper refers to refined output, including import of crude copper. The figures for building permits granted in certain cities cover 49 leading cities. They are the figures given in the *Statistical Abstract of the United States* for 1916, less the figures for Fall River, Providence, and Reading, cities for which data are not available for all years. Figures for 1917 were compiled from *Bradstreet's Review*. The index number covering the number of revenue tons of freight carried on railroads is based upon six representative railroads, the only ones for which figures for the period 1913-1917 were available for calendar years. The railroads included are: Cleveland, Cincinnati, Chicago & St. Louis Railroad; Delaware and Hudson Co.; Delaware, Lackawanna & Western Railroad; New York, Chicago and St. Louis Railroad; Pennsylvania Railroad; and Pittsburgh, Cincinnati, Chicago and St. Louis Railroad.

[2] Only net circulation of Federal Reserve notes is included in the circulation, but the net circulation is computed on the basis of allocating to the notes the same percentage of reserve as that represented by the percentage of cash reserve held by the Federal Reserve banks to deposits and outstanding notes combined. In this way the figures for the period before the federal reserve amendment of June 21, 1917, are made comparable with those after that date.

to make the figures representative of the entire year, and to render them comparable with those for the growth of business, we have taken for each year the average of the circulation figures for the four quarterly dates, March 31, June 30, September 30, and December 31.

MONETARY CIRCULATION OF THE UNITED STATES

Year	*Amount of money in circulation (Millions)*	*Index Number*
1913	$3,390	100
1914	3,505	103
1915	3,682	109
1916	4,159	123
1917	4,914	145
1918[1]	5,428	160

This shows an increase in the total circulation over 1913 of forty-five per cent for 1917, and sixty per cent for the first three-quarters of 1918. The increase, it will be noted, is much larger than that of the physical volume of business, which was only twelve per cent for the period 1913 to 1917.

The country's total stock of money (average of four quarterly dates) rose from 3,732 millions in 1913 to 5,661 millions in 1917, an increase of 52 per cent, and to 6,848 millions in 1918 (three quarterly dates), an increase of 83 per cent over 1913; while the stock of monetary gold rose from 1,885 millions in 1913, representing 51 per cent of the total stock of money, to 3,064 millions in 1917, representing 54 per cent of the total stock; and to 3,066 millions in 1918, representing 45 per cent of the total stock.

It appears, therefore, that while there has been a great increase in the amount of monetary gold in the country since 1913, that increase has not been commensurate with the increase in the country's stock of money, or of its monetary circulation.

Deposit Currency

The great bulk of the business of the United States—variously estimated from 75 to 90 per cent — is effected not directly by means of cash, but by means of bank deposits which circulate through the instrumentality of bank checks. An examination of the growth of deposit currency is therefore a most important part

[1] Figures represent the average for three quarterly dates.

of any study of the extent of price variations. Before considering that growth, however, it will be helpful to consider briefly and somewhat parenthetically the growth of bank reserves during the same period.

Check deposits are all payable in cash on demand and, although they are supported by the other assets of the banks, their most direct and immediate support is the cash reserve. Deposits must be paid in cash when cash is demanded, and the other assets may be used for that purpose only when turned into cash. In its function of serving as bank reserves, money possesses its most efficient use. Approximately half of the entire monetary circulation of the country is held in bank reserves for the support of bank deposits.

Recent improvements in our banking system, growing out of the establishment of the Federal Reserve system and its subsequent development, have made our reserve money, as will be seen below, more efficient than it formerly was; in other words, have enabled a dollar in reserve to do more money work than before. This in effect is equivalent to increasing the supply of reserve money.

In the light of this fact let us examine the evidence available on the subject of the growth of cash reserves, and the bank deposits from 1913 to 1918. In the examination of cash reserves held against deposits, we shall concern ourselves not with legal reserves, but only with ultimate cash reserves; namely, cash on hand in individual commercial banks and in Federal Reserve banks—cash reserved as the currency support for individual and government deposits.

The reserve figures used in this report cover the following items: (1) the average amount of cash in vaults of national banks for the dates of the five or six comptroller's calls each year, said cash being taken to include specie, legal tenders, fractional money, and bank notes of other banks;[1] (2) the cash in vaults of state banks and loan and trust companies about July 1 of each year, as shown by the reports of the Comptroller of the Currency; (3) such a part of the cash reserve of the twelve federal reserve banks

[1] The five per cent redemption fund deposited with the Treasurer of the United States, for the redemption of bank notes, although countable as part of a bank's legal reserve money against deposits prior to the inauguration of the federal reserve system, was in fact so essentially a redemption fund for bank notes that it has not been included in the cash reserve against deposits given below.

as is properly allocated to deposits as contrasted with federal reserve notes.

Computed on the above basis, the cash reserves against deposits of all commercial banks and of the twelve Federal Reserve banks increased from 1,488 millions in 1913 to 2,254 in 1917, an increase of fifty-one per cent. Comparable figures for 1918 are not yet available. If we examine the proportion of the total money in circulation represented by cash in banks held as reserves against deposits (exclusive of reserves held against federal reserve notes), for the same period, we find that "the ratio of cash reserves against deposits in banks to total monetary circulation" increased from forty-four per cent in 1913 to forty-six per cent in 1917. The conclusion, therefore, is that a slightly larger percentage of the money in circulation in the United States was in bank reserves (against deposits) in 1917 than in 1913.[1]

Let us now return from this parenthetical discussion concerning reserves to an examination of the growth of the deposit currency for which these reserves provide the cash support. What has been the growth of bank deposits during the period 1913-1918? In such an inquiry we are concerned only with demand deposits subject to check. We may therefore eliminate the deposits of savings banks and of private banks, although a few of these deposits come under that class.[2] Deposits of one bank in

[1] The basis of the apportionment is the assignment to deposits of that proportion of the total cash of the reserve banks (including that deposited as collateral with the federal reserve agents for federal reserve notes) which is represented by the ratio of the total deposit liability of the banks to the total deposit and federal reserve note liability. The figures for each year used in computing the federal reserve banks' reserve against deposits are the average figures for the four quarterly dates coming near the end of the four quarters beginning with the date of March 31 each year.

[2] Time deposits of commercial banks should properly be eliminated, but inasmuch as these are not separated from the demand deposits in the official figures covering the period prior to 1915, it is impracticable to separate them in our figures. Furthermore, the same legal reserve was required to be held against them by national banks prior to the inauguration of the federal reserve system as was required against demand deposits, and the reserve included in the figures previously given in this paper for commercial banks included reserves held against time deposits. Inasmuch as time deposits in commercial banks are relatively small as compared with demand deposits, and show during the few years for which we have separate figures a roughly constant ratio to demand deposits, their inclusion in the deposit figures for the entire period will not materially affect the result.

another bank may likewise be eliminated. Since these deposits are chiefly for reserve or collection purposes they may best be considered as part of the machinery of banking. Government deposits in either commercial banks or federal reserve banks should be included among the deposits representing the deposit currency of the country regardless of the fact that the law does not require a legal reserve to be held against most United States government deposits in commercial banks. Government deposits are usually payable on demand and are subject to check. Inasmuch as other annual figures have been based upon the average figures for quarterly periods, or for the dates of the comptroller's calls each year, the same policy will be followed in computing deposits. For deposits of state banks and trust companies, figures must be taken for a date about July 1, since that date in the middle of the year is the only one for which comprehensive figures are available. Constructing the figures for deposits in the manner just explained, we obtain the following figures for the growth of deposits during the period 1913-1918.

GROWTH OF BANK DEPOSITS, 1913-1918

Year	*Total Deposits Amount (Millions)*	*Index Numbers*
1913	12,678	100
1914	13,430	106
1915	14,411	114
1916	17,840	141
1917	21,273	168
1918 [1]	(24,600)	(194)

These figures show a pronounced growth in bank deposits since 1913. The growth is roughly the same for national banks, and for state banks and trust companies combined. For the period 1913-1917, the increase was 68 per cent for the combined deposits of national banks, state banks, trust companies, and the government deposits of federal reserve banks. For the period 1913 to June 30, 1918, the rate of increase for national banks was 87 per

[1] Figures for 1918 represesent an average for the dates of the three comptroller's calls, namely, March 4, May 10, and June 29.

Figures for state banks and trust companies for 1918 are estimated, on assumption that the rate of increase for state banks and trust companies in 1918 over 1917 stood in the same ratio to the rate of increase for national banks as it did in 1917 over 1916.

cent and the estimated rate of increase for the combined deposits was 94 per cent.

Total cash reserves of banks, it will be recalled, increased 51 per cent between 1913 and 1917. Bank deposits having grown therefore much more rapidly than bank reserves, it follows that each dollar of reserve money is now supporting a larger superstructure of bank deposits than before. This fact will appear from the following table, based upon the figures previously given.

PERCENTAGE OF CASH RESERVE TO COMBINED DEPOSITS

Year	*Percentage*
1913	11.7
1914	11.7
1915	11.9
1916	10.7
1917	10.6

The average percentage of cash reserve to deposits was therefore about one point lower than it was the year before the war. Measured percentage-wise the decline from 1913 to 1917 was 9.4.

The index number for the growth of the physical volume of business showed for the period 1913 to 1917 an increase of twelve per cent. Satisfactory data for 1918 are not yet available. From 1913 to 1917, the amount of money in circulation increased 45 per cent, and from 1913 to 1918 it increased 60 per cent. The country's total stock of money from 1913 to 1917 increased 52 per cent, and from 1913 to 1918, 83 per cent. The proportion of the total stock represented by gold was 51 per cent in 1913, 59 per cent in 1917 and 45 per cent in 1918. Although the proportion of the country's total money supply (exclusive of that held in federal treasury vaults and of that held as reserve) declined slightly from 1913 to 1917, namely from 56 to 54 per cent, the absolute amount outside of banks increased 40 per cent.

At this particular time, moreover, there are reasons to believe that the dollar in active circulation was becoming more efficient. This was the period of the revision of the federal banking system, and the inauguration of the Federal Reserve system. Certain features of that revision have enabled the average dollar in active circulation to do more money work than formerly. For example, the creation of the gold settlement fund has made possible transfers of many millions of dollars by means of book credits that would otherwise have required the shipment of cur-

rency from one Federal Reserve district of the country to another, and has therefore reduced the average amount of money tied up in transit. The establishment of twelve Federal Reserve banks, each with the privilege of note issue, and the establishment of a number of Federal Reserve branch banks have brought sources of new currency supply nearer at hand in many sections of the country than ever before, and this has also reduced the necessity of currency shipments and has lessened the average distance of such shipments as are made. This result has been further promoted by the creation of the Federal Reserve clearing and collection system. There is little reason to doubt, therefore, that the average dollar in active circulation in the United States does its work more efficiently to-day than it did before the war.

More important than the money in active hand-to-hand circulation is that in banks which serves as the cash basis of our vast deposit or check currency. Upon that subject our figures show that a slightly larger proportion of the total money of the country (outside of the federal treasury and exclusive of reserves held against Federal Reserve notes) is held in bank reserves against deposits now than in 1913, the proportion having increased from 44 per cent to 46 per cent. They show further that the amount of money held in bank reserves against deposits has increased enormously since 1913, the increase for 1917 over 1913 being 51 per cent as contrasted with 12 per cent for the physical volume of the country's business. Not only has the amount of reserve money greatly increased since 1913 but each dollar in reserve is carrying a greater burden of deposits than it was prior to the war. In 1913 the average cash reserve to deposits for the entire country was 11.7 per cent, and in 1917 it was 10.6 per cent. In other words, in 1913, 11.7 cents provided the cash support for a dollar of deposits, while in 1917 10.6 cents supported the same load. The last item alone represents an increased efficiency of the dollar acting as reserve money, of 9.4 per cent.

Combined demand deposits of national banks, state banks and trust companies, and government deposits in Federal Reserve banks, increased from 12,678 millions in 1913 to 21,273 millions in 1917, an increase of 68 per cent, and to 24,600 millions (estimated 6 months) in 1918, an increase of 94 per cent. It is probable that the efficiency of bank deposits themselves circulating through the instrumentality of checks has also increased since 1913 under the "speeding up" pressure of war

needs, and that the rate of deposit turnover has also increased, but on that point satisfactory data are not yet available.

The evidence therefore shows that a slightly larger proportion of the money of the country was in bank reserve in 1917 than in 1913, that the amount of cash in reserve increased much more rapidly than the business of the country during that period, and that demand deposits increased much more rapidly than did reserves, so that each dollar in reserve provided the cash basis for a large amount of deposits in 1917 than in 1913. Furthermore, it appears probable that the average bank deposit has a higher rate of turnover in 1918 than in 1913, or, in other words, that a larger amount of check business is being done in 1918 than was done in 1913 for each dollar of average daily deposit.

The great reduction in legal reserve requirements brought about by the Federal Reserve Act was largely rendered possible by the fact that the country's commercial paper was made more liquid by that act, both through the rediscount privilege provided by the federal reserve banks, and through the development of an open competitive market for commercial paper. Banks no longer need to maintain large cash reserves, which are often comparatively idle, in order to be able to carry the peaks of the load. They have a ready recourse for funds at the Federal Reserve banks in time of need. The Federal Reserve banks in turn have the power to meet sudden calls for funds through the issuance of federal reserve notes, or through the reduction, under emergency conditions, of their cash reserve below the normal legal minimum.

During the war we were large exporters of supplies to belligerent countries, and, on net balance, despite our large purchases of American securities from abroad, we have had large sums due us. Hence the tremendous net importations of gold that this country has witnessed in recent years—importations which together with our home production have increased our stock of monetary gold from about 1,885 millions in 1913 to 3,046 millions in 1917, and 3,066 millions in 1918. Our gold embargo [1]

[1] The embargo was laid by a proclamation of President Wilson dated September 7, 1917. Under its provisions the exportation of coin, bullion, or currency from the United States was prohibited, except when specifically licensed by the Federal Reserve Board with the approval of the Secretary of the Treasury. Since that date gold exports from the United States have been very small, and the privilege of exportation has been jealously guarded. See *Federal Reserve Bulletin*, Oct. 1, 1917, pp. 736-739.

has for some time prevented this gold from leaving the country in any considerable quantities and from going to those countries with which our exchange rates are unfavorable. To demand gold from the banks or the treasury, or to use it in circulation, was during the war generally looked upon as an unpatriotic act. Every effort was made in the United States, as in other belligerent countries, to impound the gold as far as possible in the vaults of the central banks where, to meet war emergencies, it might serve as a basis for the maximum amount of credit—bank notes and deposits. There is little incentive for a corporation or an individual to have gold coin in his possession. He cannot export it, and to spend it or to have it in his pocket or till is to brand himself as unpatriotic. Meanwhile all kinds of money, and deposits in solvent banks were, with some qualifications, at par with gold; but gold, and with it all other kinds of money, has been rapidly losing its purchasing power over commodities.

Prices

Let us now examine briefly the evidence with regard to price movements. There exist in the United States a number of index numbers of prices, which are familiar to the readers of this report. All of these price index numbers tell essentially the same story. The most comprehensive of them, in the field of prices covered, embracing as it does prices for about 292 commodities, and the one that is constructed upon the most scientific lines, is that of the federal Bureau of Labor Statistics, and we shall therefore confine ourselves to the evidence afforded by this index number. Inasmuch as our previous figures have been constructed as far as possible on the basis of average conditions throughout the year, instead of for conditions on any one date each year, we shall use here average monthly price figures, except where otherwise designated. The movement of wholesale prices according to the figures of the Bureau of Labor Statistics has been as follows since 1913.

Index Numbers of Wholesale Prices

1913	100
1914	99
1915	100
1916	123
1917	175
1918 (8 months)	192

This shows an increase of 75 per cent from 1913 to 1917, and of 92 per cent to 1918. An analysis of the figures shows that a substantial rise in prices took place in all kinds of commodities. Taking the nine groups of commodities into which the Bureau of Labor Statistics classifies the 292 commodities ordinarily covered by its index number, we find that for the respective groups of commodities the average index number increased from 1913 to 1917 and to 1918 (6 months), respectively, in the following percentage; farm products 88 per cent to 1917 and 111 per cent to 1918; food, etc., 77 per cent to 1917 and 82 per cent to 1918; cloth and clothing 81 per cent to 1917 and 125 per cent to 1918; fuel and lighting 69 per cent to 1917 and 71 per cent to 1918; metals and metal products 108 per cent to 1917 and 75 per cent to 1918; lumber and building materials 24 per cent to 1917 and 42 per cent to 1918; drugs and chemicals 85 per cent to 1917 and 113 per cent to 1918; house-furnishing goods 55 per cent to 1917 and 89 per cent to 1918; and miscellaneous goods 53 per cent to 1917 and 68 per cent to 1918.

Viewing the situation from another angle, and comparing individual prices for March, 1918, with those for July, 1914, we find that of the thirteen items of animal products covered by the figures of the Bureau of Labor Statistics every one increased decidedly in price during that period, the increase varying from thirty per cent to 182 per cent. For vegetable products, eleven in number, the price rose decidedly for all but one, namely, potatoes, where there was a decline of 43 per cent for the dates mentioned. Of the other ten items, the smallest increase registered was 57 per cent, and the largest 364 per cent. Of the thirteen items classified under textiles and leather goods, every one increased decidedly in price, the smallest increase for any item being 36 per cent and the largest 228 per cent. For the fourteen items of mineral products, every one likewise increased decidedly in price, the smallest increase being 33 per cent, and the largest one being 200 per cent.[1]

Coming to retail prices we find that the index number for the retail prices of food in the United States prepared by the Bureau of Labor Statistics shows an average increase from August 15, 1913 to August 15, 1918 of 70 per cent. A recent investigation

[1] For details of these figures see *Monthly Review of the Bureau of Labor Statistics*, June, 1918, p. 91.

made by the National Industrial Conference Board [1] shows that the retail prices of clothing of the types purchased by laboring men rose on the average from July, 1914 to June, 1918, 77 per cent; [2] that the average price for fuel and light rose 45 per cent; [3] and that average house rents of workingmen's houses rose 15 per cent.[4]

There is ample proof, therefore, of a very great rise in prices since 1913, and of the fact that this rise has affected all classes of commodities, although it has naturally affected different classes of commodities and different commodities within each class differently, because each commodity has its own peculiar conditions of production and demand, and because the government has followed a price-fixing policy with regard to some commodities. The advance has naturally been greatest for those items upon which the war demand has been most concentrated.

There is some evidence that the prices of real estate have fallen in recent years on the whole, although the real estate market has not been a very active one, and we have no price statistics concerning it that are comprehensive and reliable. There is no standard unit of real estate. During the last few years, it is well known, prices of securities such as stocks and bonds have likewise fallen decidedly, on the average. Real estate and securities, however, are durable income-bearers which yield their income usually over long periods of time. Their value therefore is to a large extent the capitalization of their prospective incomes at the current and prospective rates of interest. The period in question has been one in which interest rates on long-time obligations have risen very decidedly, and it is therefore natural that permanent income-bearers, like land and securities, should have their capital value greatly reduced, except in the cases of stocks where the dividends have increased more than enough to offset the decline in value that would otherwise have resulted from the advance in the current market rate of interest. In these cases, it may be said that the yardstick of value in terms of which future incomes are measured has been shortened in length, but that contemporaneously the interest rate has risen, or,

1 National Industrial Conference Board, "Wartime Changes in the Cost of Living," *Research Report*, No. 9, Aug., 1918, p. 64.

2 *Ibid.*, p. 64.

3 *Ibid.*, p. 70.

4 *Ibid.*, p. 35.

in other words, the present relative importance of the right to a given future income as compared with a present one of the same size has declined.

Wages

Wages, which are but one kind of prices, have also risen during this period of inflation. Unfortunately we do not have in the United States any comprehensive wage statistics for the entire country comparable with the price statistics of the Bureau of Labor Statistics. The meagre evidence that is available shows that wage advances have been very uneven, both among different occupations and within the same occupation in different parts of the country. In some districts wage advances have been much more pronounced than in others; advances for example have been especially large in the shipbuilding districts, in the neighborhood of munition factories, and near large cantonments. Some types of labor, as, for example, many kinds of metal workers, workers in textile factories and shoe factories, have received large advances in wages since the war broke out, advances of from 40 to 75 per cent having been common. For certain other types of workers the wage advances in most sections of the country have been relatively small; witness the wages of compositors and linotype operators, bakers, motormen and conductors on street railways, hod carriers, bricklayers, plasterers and steam fitters in the building trades [1]—classes of laborers whose wage increases since the war broke out have normally been in the neighborhood of ten to twenty per cent.

A comparison of the prevailing wages of male farm labor in the various states for 1910 and 1917 is given in the *Monthly Crop Report* of the United States Bureau of Crop Estimates for March 1918. This comparison shows for the different geographic sections of the country the following average wage figures per month without board:

[1] See article on "Wages and the War" published in *Monthly Review* of the Bureau of Labor Statistics for March, 1918, pp. 134-136, which summarizes the results of the recent studies in this subject made by Hugh S. Hanna and W. Jett Lauck, published in their book *Wages and the War*, New York, 1918.

Section	Average Wages per Month 1910	1917	Rate of increase per cent
North Atlantic	$33.19	$48.06	45
South Atlantic	19.75	30.80	56
North Central east of Mississippi River	31.81	44.98	41
North Central west of Mississippi River	35.45	49.46	40
South Central	21.90	31.07	42
Far Western	46.48	63.59	37
United States	27.50	40.43	47

The results of a study of wage movements in the iron and steel industry made for the United States Bureau of Labor Statistics are summarized by the author, Mr. N. C. Adams as follows: "The average earnings per hour of employees in the principal productive occupations of six departments of the iron and steel industry had increased, in September, 1917, as compared with May, 1915, as follows: in blast furnaces, 52 per cent; in Bessemer converters, 58 per cent; in openhearth furnaces, 38 per cent; in blooming mills, 35 per cent; in plate mills, 50 per cent; and in sheet mills, 95 per cent . . . Many of the companies furnishing information for this report have notified the Bureau that they granted a further increase of ten per cent in rates of pay to their employees in October, 1917, and it is believed that all of the companies represented joined in this additional increase." [1]

The records of the New York State Industrial Commission show that for the reporting manufacturing establishments throughout New York state the average weekly earnings per employee for August of each year, 1914 to 1918, was as follows: [2]

Year	Amount	per cent
1914	$12.53	100
1915	12.89	103
1916	14.44	115
1917	16.44	131
1918	21.23	169

Relative wage figures for 37 occupations for the country as a whole for the period 1914-1915 to January 1918 have been

1 *Monthly Review of the Bureau of Labor Statistics*, March, 1918, p. 29.

2 "This average is obtained by dividing the total payrolls by the number of employees on the payrolls. In the computation of this average no distinction is made between men and women, nor between shop and factory office employees." *The Bulletin*, issued monthly by the New York State Industrial Commission, September, 1918, p. 271.

compiled by Messrs. Hanna and Lauck.[1] The occupation showing the smallest advance was that of compositors and linotype operators (newspapers, day), whose average advance was but six per cent, while that showing the largest advance was blacksmiths (shipyards, Delaware River) whose average advance was 105 per cent. The average advance for all 37 occupations was 42 per cent.

Very much smaller advances on the average are shown by the figures for union wage scales, covering a large group of occupations. Taking the rates for 1913 as 100, these figures show the movement of rates of wages per hour to have been as follows:[2]

1913	100
1914	102
1915	103
1916	107
1917	114

These last figures give results so out of harmony with the other evidence that it is doubtful whether they are fairly representative of wage movements in general throughout the country.

On the basis of the scattered evidence cited, it would appear to be a fair guess that the average increase of laboring men's wages (including agricultural labor) from 1913 to the end of 1917 was somewhere between 40 and 50 per cent, and that during the year 1918 the rate of advance has in general been more rapid than during any earlier year of the war.

If one were considering the welfare of the wage-earning class, other factors would need to be taken into account, such as the shifting of men from the lower-paid to the higher-paid occupations, the reduced amount of unemployment, opportunities for overtime, and overtime rates of pay, the employment of additional members of the family under the stress of war demands, the greater intensity of much of the work performed in time of war than in time of peace, the additional expenses of the household when the housewife is working away from home—expenses for board, laundry, care of children, transportation, etc. Here, how-

[1] *Wages and the War.* Reprinted in the March number of the *Monthly Review of the Bureau of Labor Statistics*, March, 1918, pp. 135-6. The figures as given cover 44 occupations, but for seven of the occupations the figures given are for weekly earnings and not wages per hour or piece. These seven occupations have been omitted in computing the average figure.

[2] *Monthly Review of the Bureau of Labor Statistics*, June, 1918, p. 146.

ever, we are concerned with the movement of wage rates themselves, and not with the broader question of the welfare of the laboring classes.

Measures taken to limit Expansion of Bank Credit

As to the general character of the situations thus depicted and their fundamental relationship to war-time finance, there can be no doubt. The committee expresses no opinion as to the general theory of what is called inflation, or as to the comparative influences of the different forces at work, but leaves the facts to speak for themselves.

Before considering the immediate fiscal results of the currency and credit changes thus reviewed, it is desirable to outline the more important measures taken for limiting the expansion of bank credit.

Very shortly after the United States became a belligerent the Federal Reserve Board undertook to urge upon the banks of the country the necessity of great conservatism in their lending operations. The policy thus decided upon was made effective in two ways, the first that of public appeals with relation to the need of economy in consumption, the second that of direct communications with the banks, both member and federal reserve. These were urged to adopt as conservative a policy as possible and to avoid the undue expansion of credit to unessential or less essential industries. Several factors combined to render this effort at the control of credit through education more or less ineffective. There are always a considerable number of industries which do not need to rely upon the banks for assistance, and since the beginning of the European War considerable additions have been made to the number of such industries, due to the fact that many lines of business have received very large returns in cash and have been able to do without the assistance of the banks. A second factor of difficulty in applying the policy of restricting credit was found in the fact that many bankers were uncertain as to the meaning to be assigned to the term *unessential* and were naturally disposed to interpret this term in accordance with the needs and requirements of their own particular communities rather than in accordance with the strict interpretation which would be given to it by those who were desirous of bringing about conditions of maximum production of goods, limitation of consumption and, as a means thereto, restriction of credit.

Again, there has undoubtedly been opposition on the part of both manufacturing and retailing interests which have been reluctant to see the development of any educational campaign having a tendency to restrict the development of their business. Although, as time has gone on, there has been a real effort by banks throughout the country to restrict the extension of credit for purposes not deemed wholly essential, there has been not a little indiscriminate lending, while the aggregate of lending of all kinds has not been as thoroughly restrained as was desirable.

The War Industries Board developed a systematic policy of rationing the industries of the country with regard to their consumption of fuel, material, labor and transportation, and this policy on their part was undoubtedly beginning to have the effect of reducing the demand for credit at banks. These substitutes for the raising of the rate of discount as a method of restraining the growth of business have, however, when taken in the aggregate, been insufficient to control expansion of credit.

During the past four years the Federal Reserve system has expanded until it now includes a very large percentage of the commercial banking houses of the country. It is therefore able to exert the same influence over the changes in the supply of credit as central banking organizations elsewhere, and it is thus able to perform a function which is of fundamental significance in connection with the financing of war or with the management of any great demand upon the banking resources of the nation. This makes a consideration of the question of discount rates under the Federal Reserve system not only a desirable, but an indispensable, adjunct to any intelligent consideration of war finance.

Since the United States became a belligerent, however, the policy of the Federal Reserve system has, as stated earlier in this report, not been that of introducing great changes into the discount rate. The question is therefore fairly raised whether the adoption of a policy of higher rates of interest and discount should not have been employed as an additional means of restricting the growth of credit. Two distinct points of view have been advocated with reference to this matter, and in behalf of both something at least may fairly be said by way of argument. Had the Federal Reserve banks at the beginning of the war adopted a policy of advancing their rates of discount in a degree which would effectively have curtailed the current demands for commercial credit, they would have materially advanced the general rate of return

on investments in the open market. An indirect result of this action would have been to reduce the value of securities of various kinds. As this tendency to declining prices of securities was already marked, the action of the system would undoubtedly have aggravated a drift which was already rather serious, and this might have been complicated by the growth of a certain uneasiness in the minds of the public concerning the probable future of interest rates and investment values. The savings banks in particular, which hold large volumes of long-time securities, would have been unfavorably affected. As has already been noted, moreover, the advance in rates of discount would not have directly exerted an important control over those lines of business which are not immediately dependent upon banks, but which rely upon cash collections from sales of goods or payment of services to carry on their ordinary operations.

In answer to this statement of the case, however, it may be pointed out that an advance in rates of discount, however alarming and suggestive of possible difficulty it might have been, was really a form of warning to the public which was essentially due and which it was only fair to supply. The maintenance of a low rate of discount undoubtedly had its effect in many directions in leading the business world at large to feel that conditions were really better than was actually the case. On the other hand, the adoption of a policy of higher rates of discount must unquestionably have had the effect of affording a strong element of cooperation with the policy of rationing or limitation of supplies of material. Most important of all is probably the fact that it would have directly discouraged member banks from presenting for rediscount paper based on government securities which, with rates as they have been, they were disposed to bring to Federal Reserve banks for conversion into reserve credits. In this same connection attention should again be given to the fact that the policy of the Federal Reserve system has been uniformly that of governing its rates of discount by reference to the rates fixed on public securities. This policy has had an unexpected result in that it has enabled the business public to obtain loans upon notes collateraled by government securities which they would otherwise not have been able to obtain at all or for which they would have paid a materially higher rate. The effect of this policy on the part of the banks has been that of gradually shifting loans collateraled by government securities to Reserve banks, while they

have retained in their own portfolios the genuine commercial paper growing out of transactions, which has been discounted with them. Conditions thus produced necessarily impair the liquid character of the banks, as can be seen by the fact that the proportion of war paper held by the Reserve banks has risen in some cases to a point representing three-quarters of their total assets, while taking all Reserve banks in the aggregate, it represents probably one-half of the total.

Effects on the Treasury

An important effect of the conditions and policies thus sketched has been that they compelled the government to pay prices higher than would otherwise be necessary for its equipment and supplies; and wages higher than would otherwise be necessary for much of its labor. In time of war there is a heavy concentration of the country's economic demand upon the types of goods most needed for military purposes, and it is to be expected that under the pressure of this increased demand the prices of such goods, as well as of the raw materials and types of labor that enter largely into their manufacture, should advance substantially; and that if there is a contemporaneous upward movement of general prices, the prices of these war essentials should on the whole rise higher than would the general price level. What proportion of the advance of war prices over peace prices of the equipment, supplies and labor which the government has bought since its entrance into the war has been due to currency and credit expansion and what proportion has been due to the concentration of war demands on war essentials it is impossible to say. When one bears in mind, however, that the average increase in the wholesale prices of approximately three hundred commodities—most of them being in no considerable degree war essentials—has been doubled since the outbreak of the war, and when one notes that large advances have taken place in the entire list he will see that the presumption is strong that a substantial percentage of the advance of war prices over peace prices of the goods which the government is buying has been due to expansion of currency and credit. This percentage computed on the enormous sums the government has spent for equipment and supplies would yield a very large figure. This means that to obtain a given supply of goods the government must raise much more money by taxes and loans than would otherwise be necessary.

Under present conditions, the government receives for the bonds it sells a currency of low purchasing power. Now that the war is virtually over, there will probably occur a gradual reduction of our currency and credit supply, with the result that the Liberty bonds will be repaid, principal and interest, in a currency of higher purchasing power than the government borrowed. It will presumably be a more valuable dollar that the government will use to liquidate these bonds. This more valuable dollar it will obtain chiefly through taxes and if it should happen, as it did after our Civil War, that the burden of federal taxes should fall largely upon other shoulders than those of the bond holders, there would be a grave injustice. If, however, the taxes for liquidating the bonds should be paid largely by the holders of the bonds and roughly in proportion to their holdings no such injustice would take place. In that case the bondholder would pay the government as a taxpayer the same dollars he would receive from the government as a bondholder.

In all those government positions in which salaries are relatively fixed, either there are imposed inequitable financial burdens upon the incumbents or there results a decline in the quality of men holding the positions. A time of war when the demands upon the government are unusually heavy is usually a time when any substantial advance in salaries is difficult for the civil list of the government to obtain; and this is particularly true of the higher officials. At such a time the government is conserving its funds for military purposes and is naturally reluctant to increase the salaries of civilian employees; while under conditions of war stress civilian employees are reluctant to ask for salary increases. With a rapidly mounting cost of living, however, they suffer if their salaries are not substantially advanced. Furthermore, advancing salaries in non-government positions are a continual temptation for men to leave the government service.

During the present war it is doubtful if many positions in the civil list, with the possible exception of stenographers and typists, have had their salaries advanced in any degree commensurable with the advance in the cost of living. It is true that civilian clerks and officials of the government should bear their full share of the war's financial burdens; but it appears probable that the salaries of the government's civil list were among the worst laggards in the race with the rising cost of living, and that during the recent war, as during the Civil War, these people were

called upon to bear a disproportionately heavy share of the burden. Outside of the civil list, as for example in munition plants, shipbuilding establishments and railroads, the government adopted a more liberal policy in the matter of wages, allowing frequent increases as the cost of living rose.

Such meagre evidence as is available concerning the movements of wages and the cost of living in Europe since the outbreak of the European war seems to tell the same story, namely, that under conditions of inflated currency and credit, wages on the whole have lagged behind the cost of living in their upward movement.[1]

The evidence on this subject for the United States since 1913 has already been discussed. Although scanty and somewhat contradictory, it shows that in some industries wages have risen to extravagant figures, and in others but very little. On the whole, however, it seems to support the conclusion that average wages throughout the United States have not risen as rapidly as has the cost of living. But whether this is true or not for that intangible thing "average wages," it is certainly true of the wages of many millions of workers. This situation was conducive to discontent among such workers, and to labor difficulties, which reduced the efficiency of labor and made more difficult and more expensive the government's task of securing promptly an adequate supply of war essentials.

We doubt whether the war could have been successfully financed without incidental changes in the volume of currency and credit and in prices. Rising prices were an effective means of curtailing the consumption of non-essentials on the part of millions of people and of thereby releasing labor and capital for war essentials, before economies in consumption could be enforced by thrift campaigns, increased taxes, rationing and preferential rights as regards transportation, fuel and credit. But although perhaps necessary to some degree, in a great war, these changes during the recent war appear to have been excessive and to have had inequitable results.

[1] *Cf.* M. Huber et L. Dugé de Bernouville, "Le mouvement des prix, du coût de la vie et des salaires en divers pays, de juillet 1914 à janvier 1918." *Bulletin de la Statistique Générale de la France*, April, 1918, pp. 247-28.

Remedial Measures

We may now consider possible measures for restoring normal currency and banking conditions. To that end the committee makes the following suggestions:

(1) It is advisable for the Federal Reserve authorities to follow a less liberal policy in the future than they have been following recently in the matter of rediscounts and collateral loans for member banks. The committee believes that the low discount rates and the low rates for short-term collateral loans which the Federal Reserve banks have been offering to member banks have unduly encouraged deposit currency expansion on the part of member banks.

These rates, which the committee believes are lower than the present conditions of the market justify, have in no small degree assisted the recent upward movement in loans and discounts of the Federal Reserve banks and the resulting large increase in Federal Reserve bank deposits and net issues of Federal Reserve notes. These deposits in Federal Reserve banks represent the legal reserve basis for an expansion of loans and of deposit currency on the part of member banks. This credit expansion appears to the committee to have been in excess of trade needs, and in excess of what would have occurred had the loan and discount rates of the Federal Reserve banks been maintained at levels more closely in harmony with market rates of interest. The Federal Reserve authorities have kept the rates of interest down by permitting, at low rates of discount, a large expansion of bank credit. If market interest rates are artificially kept down by a policy that puts commodity prices up, the man who borrows money obviously needs to borrow more than he otherwise would in order to buy the same supply of goods. In other words, he gets dollars of a lower purchasing power and therefore needs more of them. The committee believes that the country has been paying for its nominally low interest rates in unduly high prices and that one remedy is for the Federal Reserve banks to advance their discount rates and in other ways to be less liberal in their loan and discount policy. Such a change in the policy of federal reserve banks would tend to restrict credit expansion on the part of member banks.

(2) A second remedial measure, and one that is to a large extent corollary to the one just mentioned, is the exercise of greater effort to discourage the " borrow and buy " policy in the

matter of Liberty bonds, in so far as borrowing to buy does not involve immediate economies in consumption or economies in consumption in the near future through the anticipation of income soon to be realized—economies that will presumably pay off the debt within a short period of time. The man who borrows to buy Liberty bonds, and carries the bonds indefinitely by means of bank loans renders very little service to the nation. He gives funds to the government that the bank itself could as well have given directly, and does nothing to make available to the government the supplies, the need for which is the *raison d'être* of the government's borrowing. Our second year of belligerency showed an exceedingly rapid increase in the amount of the government debt held by banks either in the form of direct investment or as collateral for loans. Loans incurred for the purchase of Liberty bonds and not paid within a reasonable time should have their rates of interest advanced progressively above the rates originally charged. Every effort should be made to encourage the policy of economizing to buy, in contrast to that of borrowing to buy.

(3) If the Treasury is to continue to endeavor to meet its requirements by recourse to anticipatory borrowing through the issue of Treasury certificates of indebtedness, it should limit its borrowings in this form to the lowest possible figure by requiring the holding of legal reserves against government deposits and by initiating a more rigid discount policy. This mode of short-term financing, conveniently described as certificate borrowing, has been utilized by the Treasury to an increasing extent from our formal entry into the war up to the present time of writing. It has consisted of the issue of negotiable short-term obligations taken by the financial institutions of the country and to a limited extent by investors, and paid for by the creation of additional bank credit in the form of government deposits, such deposits being thereafter drawn upon and dispersed in the course of public expenditure and ultimately taking the form of additional commercial deposits and enlarged deposit currency circulation. The certificates of indebtedness have eventually been used in payment of subscriptions made by or through the banks to a succeeding Liberty loan or have been liquidated or redeemed from out the proceeds of such loan.

Certificate borrowing has made it possible for the Treasury to supply its fiscal requirements with great ease and with reason-

able, although not maximum, economy. But, on the other hand, it has involved the creation of a huge volume of additional bank credit without corresponding contraction or deflation incident to the liquidation or funding of the certificate issues.[1]

(4) The evil consequences of a large expansion of credit accompanied by the placing of government loans with banks cannot be overlooked and it is urgent that at the earliest moment they should be eliminated. The question how this can be done has received the attention of the committee. We are of the opinion that the process of war financing by means of large issues of certificates which are placed with banks and are carried by the latter until they can be funded into long-term bonds, which in turn are purchased by investors on the strength of bank credit extended to them by the very institutions which at first took up the certificates, should be brought to an end. The effort should henceforth be that of transferring as rapidly as possible to private ownership the great holdings of certificates and bonds which are now carried by the banks in one form or another. The practical methods of bring this condition of affairs to pass will, we think, be found in a steady reduction of the war paper to be carried by the reserve banks. In the past a serious evil has perhaps been found in the circumstance that a commercial bank could always be sure of passing on its war paper to a reserve bank without any penalty in the form of a higher rate of interest and sometimes at a profit. In consequence the portofolios of Reserve banks have become clogged with such paper and it has risen in some instances to between seventy and eighty per cent of the total holdings of paper in the hands of such institutions. Fortunately, these advances have been made upon short time and there are no long commitments for the future.

(5) The committee had noticed with apprehension the increasing agitation in certain quarters in favor of stimulating gold production by means of a government bounty or some other form of government aid. Without entering into a discussion of the various phases of this subject, the committee wishes to register its emphatic opinion that the attempt by a government bounty to stimulate the production of gold at a time like the present, when, through the wide extension of the use of paper money and deposit currency, through the increasingly efficient use of gold in bank

[1] Compare Hollander, *War Borrowing: A Study of Treasury Certificates of Indebtedness of The United States*, chap. v.

reserves, and through other influences, the purchasing power of gold has been practically cut in half during a period of four years, would be both unsound economics and unsound public policy. The plan amounts to a proposal to tax the people to provide bounties for stimulating an industry whose stimulation would raise still higher the high cost of living from which these same people are at present suffering. It would artificially enlarge the base of our credit structure with inevitably bad results. There is no reason to believe that the new supplies of gold whose production would be stimulated by a bounty would not be used as the present ones are being used, namely, chiefly as bank reserves for a continually rising structure of circulating credit, a structure that for some time has been rising with abnormal rapidity. The gold bounty, moreover, even if granted, would probably fail to accomplish its purpose. If the bounty should stimulate gold production, the increased gold production in raising the general price level would raise the prices of machinery, supplies and labor used by the gold-mining concerns; and these advances in prices would in turn lead to demands for additional bounties to cover rising expenses and so forth *ad infinitum.*

(6) The committee refers particularly to the advisability of terminating at the earliest possible moment the gold embargo and the control of international exchange which have been features of our war emergency work. Were we to remove the gold embargo to-day the amounts for which foreign countries could draw upon us would be small. Perhaps a hundred millions could be drawn by South America and perhaps as much or more by the Orient. If a total of three hundred millions should be drawn from the United States, it would be far more than most students of the subject expect, while in all probability the act of removing the embargo would in most cases destroy the disposition of foreign countries to take advantage of the freedom offered to them. We are the holders of more than eight billions of government securities, the interest and principal of which must eventually be paid in some form; while during the war we have paid a very large fraction of our pre-war indebtedness. The remaining fraction is more than offset by the claims upon foreign enterprises which have been sent to us in payment for the goods we have shipped abroad. We are therefore out of debt on private account and very large creditors of the rest of the world on public account. We control to-day from one-fourth to one-third of the

available gold supply of the world. The re-establishment of a free international market for gold and the opening of a satisfactory basis for trading in foreign exchange is now an essential basis for the restoration of normal commercial relations with foreign countries.

In some respects the problems of the United States and Great Britain are on these subjects similar. For while England has parted freely with her gold when goods were needed, the United States has encountered very much the same problem of currency and credit expansion that has had to be settled in England. The close of the war finds the credit and currency systems of both countries unduly expanded and for similar reasons. Despite the great abundance of gold in the United States the danger of over-expansion is present in this country, just as it is in Great Britain, because of the non-liquid character of the assets of the banks that have been used for the purpose of building up a great structure of purchasing power which continues in existence and in no wise provides the means for its own curtailment or liquidation. We should like in closing to call attention to the recent report of the British commission, headed by Lord Cunliffe, on the subject of currency and foreign exchanges after the war, and would commend this to the attention of American readers as being in many respects applicable to the problems which we must meet in the United States.[1]

[1] "16. If a sound monetary position is to be re-established and the gold standard to be effectively maintained it is in our judgment essential that government borrowings should cease at the earliest possible moment after the war. A large part of the credit expansion arises, as we have shown, from the fact that the expenditure of the government during the war has exceeded the amounts which they have been able to raise by taxation or by loans from the actual savings of the people. They have been obliged, therefore, to obtain money through the creation of credits by the Bank of England and by the joint-stock banks, with the result that the growth of purchasing power has exceeded that of purchasable goods and services." *First Interim Report of the Committee on Currency and Foreign Exchanges after the War*, London, 1918 (Cd. 9182).

VI

SUMMARY

The conclusions of the above report may be summarized as follows. In financing the present war the laudable effort was made from the very beginning to secure as large a revenue as possible from taxation. This effort, which resulted in defraying from taxation about one-quarter of the war outlays (inclusive of loans to the Allies), involved exceedingly heavy burdens. The chief element in the system consisted of direct taxes which, in the shape of income and excess-profits taxes, yielded in 1918 well nigh three-quarters of the tax revenue.

1. *Income and excess-profits taxes.* Dealing first with the income tax, it is to be noted that the act of 1917 provided for a structure of great complications, some of which are removed in the new House bill. A number of improvements, however, remain to be made, among which the following—a few of them now incorporated into the bill just reported by the Senate Committee on Finance — are deserving of mention. There should be only a single rate for the normal income tax, discrimination between larger and smaller incomes being made only in connection with the super-tax. The definition of taxable income is susceptible of further improvements. Taxpayers should be permitted to deduct losses sustained in any transaction entered into for profit, even though such a transaction is not connected with any trade or business. The arbitrary limitation hitherto imposed on corporations in respect to deductions allowed for interest on debt ought to be removed. The proceeds of life-insurance policies paid to the estate of a decedent should be excluded. More adequate provision should be made for the amortization of plants acquired since the outbreak of the war and for the shrinkage on the value of inventories after the war. Corporations should be permitted to deduct all dividends received from the stocks of other taxable corporations. If stock dividends are to be taxed as income, the existing method of taxing them should be so changed as to provide for the taxation

of only the difference between the value of the shares held by the stockholder after the declaration of the dividend and the price paid for his original shares of stock. The exemption of interest upon state and municipal obligations should be abolished. While it would have been desirable to apply the same principle to federal securities, the only practicable remedy at present in this respect is to alter the provisions affecting the permissible debt deduction for income from non-taxable securities. Finally, the extremely high rates of the super-tax, especially when combined with the excess-profits tax have, in not a few cases, produced undoubted hardship.

The excess-profits tax has proved a great fiscal success, which is due, however, in large degree to the skill and good judgment of the internal revenue department in administering the act and to the loyalty of the taxpayers in complying as best they could with a crude, obscure and, in many ways, harsh and unequal measure. The law undertook to levy the tax at rates varying with the percentage which the taxable income bears to the invested capital. Statistics show, as might have been expected, that the tax collected bore no necessary relation to war profits and imposed much heavier rates upon small, than upon large, concerns. This led the Treasury Department to suggest the alternative scheme, which added a war-profits tax to the excess-profits tax. The result of such an alternative method may indeed reduce the number of cases of erratic workings of the tax, but will greatly complicate the law and increase the cost of administration. Great difficulties have been encountered in administering the present law in defining invested capital, especially in connection with capital invested in non-taxable securities, in the case of borrowed capital, in cases where corporations had issued stock for the purchase of tangible property, in connection with value of good will, and in the provision made for patents and copyrights. In the definition of income, also, several difficulties have arisen, especially in connection with the limitation of deductions on account of salaries actually paid; in the case of profits which fluctuate from year to year; in the case of industries carried on with different degrees of risk and different degrees of stability; and in the case of net income in excess of the specific exemptions. Other great difficulties appeared in connection with the determination of nominal capital. In fact, had it not been for the administrative discretion exercised by the internal revenue department which went to the extreme limit, and perhaps even transcended

the limit, in interpreting the law, the results would have been far more unsatisfactory than was actually the case. The greatest desideratum in the law, if it is to be continued, is the need of simplification. The ordinary citizen cannot understand it, and in many of the difficult questions which arise cannot get very good advice from the average lawyer, accountant or local internal revenue official. If a tax on business profits is to be continued at all after the war, Congress should discard the cumbersome and complicated paraphernalia of the present law and levy a simple tax upon the net income derived from business enterprise.

While from the fiscal point of view the excess-profits tax has been conspicuously successful, the industrial effects must not be overlooked. It is too early at the present time to reach a final conclusion, but the investigation of the committee resting upon an analysis of data covering over four hundred representative concerns seems to point to the following conclusion. If we divide businesses into those that have expanded during the war and those that have not expanded, a real problem arises in the case of the former category. Those that have expanded slightly or have managed to expand without greatly increasing their plant or merchandise are in relatively the best position. On the other hand, not a few concerns which have expanded greatly and which have accumulated a large proportion of tangible assets are in a highly unsatisfactory condition. Book profits, in times of expansion and inflation, are not the same as realized profits. A business which expands its operation materially may find that a large part of its war profits will be needed to finance its expanded business, while it may also be obliged to borrow considerable sums. If its earnings are large and are not absorbed by excessive taxation, it may reasonably expect to pay its loans, provide for a possible shrinkage of its tangible assets, and ultimately realize its war profits. Expansion has its hazards, one of the most important of which is taxation. It is by no means improbable that in not a few cases our income and excess-profits taxes are imposed upon income that can never be realized and upon profit that will yet turn into loss. In any case, it is certain that the return of peace makes it necessary for Congress to consider carefully the effects of revenue legislation upon the readjustments which now seem to lie ahead of American industry.

2. *Consumption and other indirect taxes.* During the Civil War the greater part of our tax revenue was derived from con-

sumption and other indirect taxes. In the present war the situation, as we have pointed out, has been reversed, a little less than one-quarter of the entire tax revenue in 1918 being derived from consumption and other indirect taxes. The House realized that this was too low a proportion and in the new bill prepared before the cessation of hostilities, these taxes were so increased that despite a considerable rise in the rates of income and excess-profits taxes, at least thirty per cent of the total tax revenue would be derived from consumption taxes. This proposal was in harmony with approved fiscal theory. For while the great advantage of the so-called direct taxes on property or income is that they present an opportunity for the distribution of the burden with some approximation to ability to pay, taxes on consumption also possess an advantage in that they afford the best means of getting at the tax-paying capacity of people individually possessing property or income in amounts too small to be effectively reached by property or income taxation, but into whose hands in the aggregate pass the greater part of the national income. While they are undoubtedly regressive in character when taken by themselves, consumption taxes, when combined with property and progressive income taxes, constitute a desirable element in a well-balanced tax system. They cannot be regarded as unduly burdensome if levied, not on necessaries, but on comforts or on articles the consumption of which can be curtailed without injury or even with benefit. Their influence in discouraging harmful consumption is, in fact, an additional point in their favor. In view of the considerations adduced in the last section, it is even questionable as to whether still more reliance might not well have been placed upon consumption taxes.

The situation has, however, been completely changed and twice changed during the past few weeks. In the first place, the cessation of hostilities has so reduced the need of revenue that in all probability the desirable proportion of tax revenue to be yielded by consumption and other indirect taxes might have been secured from taxes on liquor and tobacco at the higher rates suggested in the House bill, together possibly with the tax on gasoline and the license taxes on motor cars. This would yield about one-third of the entire tax revenue—a not excessive figure.

The possibility, however, of the adoption of prohibition before long involves a loss of over a billion dollars in the estimated

revenue, under the rates proposed in the House bill. If prohibition is adopted, it will probably render necessary an increased tax on tobacco as well as taxes on the so-called food luxuries, such as tea, coffee and cocoa, together possibly with an increased tax on sugar. But even these changes would be inadequate to fill the gap and there would be presented the important problem of whether the loss of revenue from the taxation of liquors should be met by direct taxes or whether resort should be had to an extension of taxes on transactions and on such commodities as might fairly be classed in the category of comforts and luxuries. The fiscal aspects of prohibition are not to be overlooked.

3. *Land and property taxes.* Had the war continued there is little doubt but that the project of raising additional revenue from land and other property taxes would have been vigorously pushed. The necessity of a constitutional amendment would, however, in any case have prevented their speedy utilization. The chief problems that now remain are the desirability of adding land and capital taxes to our annual sources of federal revenue and the utilization of the so-called capital levy to reduce or to extinguish the war debt. Although there is a strong presumption against federal land and capital taxes on account of their interference with the state and local tax systems, the committee has not been able to give this subject sufficient study to permit it to express an unqualified conclusion. With reference, however, to the so-called capital levy, that is, a single levy laid once and for all upon property, and of an amount too great to be paid conveniently from current income, the arguments seem to be overwhelmingly against the proposition in this country. Entirely apart from the administrative or constitutional difficulties involved, the effect upon business might be disastrous, the penalty upon savings would be undoubted, the tendency to foster extravagance of public expenditures would be probable, and the existence of the tax-exempt bonds would produce the greatest inequality. For a nation in the present position of the United States, consequently, such a measure as the so-called capital levy has no proper place in any fiscal plan. As an alternative for repudiation in a country on the verge of bankruptcy, something can be said for the project. For a nation solvent and unembarrassed, it holds no attraction.

4. *Public credit.* It is unnecessary to defend the use made in our war finance of public credit. In view of the gigantic ex-

penditures of the war, there was not a choice between loans and taxes. It was necessary, at the very outset, to make use of credit on a hitherto unknown scale. While the United States undoubtedly acted wisely in raising as much as possible from taxation, it remains true that the greater part of war expenditures has been defrayed, and necessarily so, from loans.

A conspicuous feature of our war finance has been the anticipatory loans, *i. e.*, the use of Treasury certificates of indebtedness issued in anticipation of the proceeds of the Liberty loans and taxes. Some phases of this method of financing are to be criticised. It has been more costly than the Liberty loans. It has necessitated the renewal and extension of short-time loans so far as the maturities of one cycle have overlapped the issues of another. Above all, since it took the form very largely of credit advances made by the banks, it has added largely to the inflation of credit which it has been the avowed policy of the Treasury to prevent.

So far as the Liberty loans are concerned, the government is to be commended for resorting neither to annuities nor to serial bonds which, however desirable in local finance, are unsuited to federal war finance. Three out of the four loans have taken the form of limited-option bonds the advantages of which are undoubted, but the corresponding disadvantages of which have somewhat been overlooked. The chief points on which criticism may possibly be urged against the Treasury are three. First, the rate of interest was kept below the market rate not only by an appeal to patriotism but by what amounted, in part at least, to some measure of compulsion. It is questionable whether the Treasury would have been able to persist in this policy if the war had continued. Secondly, with reference to the terms of payment, the present debt is not well arranged for a policy of energetic debt reduction. The best time to undertake debt payment is shortly after the cessation of a war, when the revenues from taxation are large, when industry is adjusted to war taxes, and when expenditures for war have stopped. This criticism, however, may be in part weakened by the flotation of the fifth Liberty loan in the spring of 1919. If, as now seems possible, the new loan will consist largely of short-time bonds running for three, five, and eight years, the unduly long period of non-payment in the present bonds will be corrected and the debt will be brought under earlier control of the Treasury.

The third criticism to be urged against the loan programme of

the government consists in the exemption of the bonds from the normal income tax. The purpose of the exemption was avowedly to make the bonds more attractive and thus to permit their flotation at a lower rate of interest. If at any time they should fall below par it was thought that it would be possible, by raising the rate of the normal income tax, to bring their value up again. Such a method, however, is both uncertain and expensive. Still less justifiable from the fiscal point of view has been the exemption of state and local bonds. In addition to raising the money, the policy of the Treasury has been as far as possible to place the bonds permanently in the hands of the investor. This purpose has been only partially successful, as is proved by the invariable decline of the market price of the bonds after each issue. Moreover, the banks were virtually compelled to subscribe largely, especially in the second and third Liberty loans. In some respects the most important task ahead of the Treasury is to accustom the American people to individual investment in government bonds. To what extent the further issues of bonds will make an appeal to the average investor at the present rate of interest paid upon them is a matter of considerable doubt.

5. *The fiscal aspects of currency and bank credit.* The fundamental question here is that of using the banking system in connection with public finance in such a way as to disturb prices as little as possible. During the war very considerable changes in both prices and wages have occurred and there is reason to think that the method of financing employed by the government has had an important share in bringing about these alterations. That some changes in prices and wages were inevitable has been the general experience in past wars, since such changes are due in no small measure to the dislocation in the conditions of demand and supply—the increasing demand for many kinds of commodities for war purposes and the decrease, or the rising cost, in the supply due to the diminution of the labor force. But it is also indubitable that another cause of difficulty is to be found on the side of currency and bank credit. A review of the facts shows notable changes in the volume of currency and bank credit, as well as a considerable rise in prices since 1913, accompanied, however, by a fall in the value of real estate and securities. In the case of wages there has also been a general rise. Although the facts at our disposal do not enable us to state with precision

whether, or to what extent, the rise in wages has kept pace with the rise in prices, the evidence seems to throw considerable doubt on the equivalence.

The double problem that presents itself is the influence of high prices on the government, and the influence of the government on high prices. To mention the latter point first, it is to be noted that the Federal Reserve Board did indeed from the very outset take some steps to limit the expansion of bank credit. Public appeals were made to induce economy in consumption, and the banks were urged to adopt as conservative a policy as possible to avoid the undue provision of credit to the unessential industries. The government gradually developed a systematic policy of rationing the industries of the country with regard to material, labor, fuel and transportation, with the object, among other things, of reducing the need of bank credit. Finally, the Capital Issues Committee and the Finance Corporation were undoubtedly of influence.

All these methods, however, were of slight consequence when compared to certain acts both of commission and of omission. Among the former is to be classed the system of anticipatory loans through the issue of temporary certificates, as well as the inducement to the "borrow-and-buy" policy in connection with the Liberty loans. Among the acts of omission the chief is the failure to put into operation an effective discount policy While good arguments may be presented on both sides of the question, the failure to increase discount rates, whatever its ancillary advantages may have been, contributed in no small measure to the rise in the general price level.

While the government action thus affected prices, the effects of high war prices on the Treasury are equally undoubted. They compel the government to pay more for its equipment and supplies than would otherwise be the case. The government receives for the bonds which it sells a currency of low purchasing power while the bonds will ultimately be paid in a currency of high purchasing power. Where government salaries are relatively fixed, the rise of prices imposes inequitable burdens upon the incumbents or leads to a decline in the quality of the men holding the positions. The evils of rising prices on the community at large are too well known to need recapitulation.

While currency and credit expansion has been to some extent unavoidable, it has probably been greater than necessary. To

prevent further aggravation of this condition during the post-bellum period, the following suggestions deserve consideration. The Federal Reserve authorities should follow a less liberal policy in the matter of rediscount and collateral loans for member banks. A greater effort should be made to discourage the "borrow and buy" policy in the matter of Liberty bonds in so far as borrowing to buy does not involve immediate economies of consumption. Recourse to anticipatory borrowing by the issue of Treasury certificates of indebtedness should be avoided. The gold embargo should be terminated and, with the re-establishment of a free international market for gold, the control of international exchange should be abandoned. Finally, the plan of stimulating gold production by means of some form of government aid is to be deprecated.

All of which is respectfully submitted:

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REPORT OF THE COMMITTEE ON WAR FINANCE

DISCUSSION AT THE RICHMOND MEETING

The consideration of the Report of the Committee on War Finance occupied one session of the Annual Meeting of the American Economic Association at Richmond, Virginia, on December 27, 1918. Advance printed copies were distributed to the members present. In opening the meeting, and in the absence of the chairman, Professor E. W. Kemmerer briefly outlined the Report and summarized its conclusions. Discussion of it was then opened by Professor T. S. Adams, who spoke informally and, owing to pressing duties, could not supply manuscript. The other discussion is here appended to the Report itself instead of being printed in the *Proceedings*.

GEORGE E. HOLMES: If it becomes necessary to retain the excess-profits tax after the year 1919 in order to meet the heavy disbursements which the government will be called upon to make, it seems essential that the tax rate should be proportional; that is, a single rate should apply to all income in excess of the deduction prescribed by law rather than progressive rates. If the tax is designed to bring in revenue over a long period of time, a moderate or even a fairly high proportional rate will achieve that end more effectively than progressive rates. The latter tend too strongly to reduce all profits to one level with relation to the amount of capital invested. Normally, large profits are essential to induce capital into fields of financial hazard — new enterprises — to encourage industry and to promote progress. The hope of large profits is an incentive which cannot be checked without danger to the national prosperity. A tax can become a measure of repression or of regulation rather than a measure of revenue. The evils of bending a tax law to such ends are great and should be avoided.

Another point which I wish to emphasize is with respect to the principle contained in the present law of placing an excess-profits tax on gains from the sale of the taxpayer's assets. Contrary to the English and Canadian practice, our law imposes a tax on gains which may be derived by the taxpayer from the sale of his assets. The result is a positive and unwise restraint on the alienation of property. Although it is true that a taxpayer may derive great gain by such sale, such a gain is an extraordinary accretion to his capital, taken from the capital of someone else, and bears no relation to his annual income. It would seem that

such gain, except in the case of dealers, should be taxed at proportional and not progressive rates, if at all.

The greatest difficulty in the administration of the present law is the computation of invested capital. A more definite and certain method should be adopted. This, perhaps, may be gradually accomplished by imposing, as a permanent part of our revenue system and in conjunction with the income tax, an excise tax for the privilege of doing business, measured by the value of the assets employed in such business. The rate of tax should be so low as not to be burdensome to the business which in normal times yields a small return upon the investment. The importance of a tax of this character lies in the fact that the record of the value of assets in particular trades and businesses so acquired would form adequate and valuable data to determine what are excess or war profits in extraordinary times, as compared with normal profits in normal times. Foresight in this direction may at some future time avoid the confusion and uncertainty which have been the bane of the government and the taxpayer in the administration of our present excess-profits tax.

JOHN CUMMINGS: I can perhaps qualify as a partial dissenter as regards one or two articles of more or less generally accepted faith.

Barring some allowances which must be made for the unsound psychological conditions which obtained early in the war, none of the arguments urged popularly, officially, and even with scientific sanction in support of the policy of meeting any very large proportion of extraordinary war-time expenditures out of the proceeds of bond issues seems convincing. Economists must recognize fully the necessity for taking into account the psychology of a present situation, the false equally with the sound psychology. But taking account of a false psychology as a condition of successful initiation of any policy, is a very different matter from accepting that psychology as sound in itself, and a real professional responsibility rests upon economists to create a sound public opinion based upon a correct analysis.

Where expenditures are mounting up so rapidly that new tax yields cannot keep pace with them, some short-time paper issued in anticipation of tax yields may be unavoidable. The tax yield should, however, be brought up as speedily as possible to the level of war expenditures, as provided in the government's financial program; and at that point where making war becomes—as it had become in England and on the Continent, after the first two or three years of adjustment—a routine business, at that point where adjustments have been made on a permanent basis. so that the war can be continued indefinitely at a given level of expenditure, the tax revenue should be brought up to the level of expenditure; and from that point on the cumulation of a funded debt should cease.

The policy of meeting the extraordinary expenditures of war out of the proceeds of bond issues is essentially a paper-money policy, and all

of the arguments that can be urged for and against the issue of unsecured fiat paper money in war time can be urged with equal validity for and against bond issues for the same purposes; and the arguments urged in support of bond issues, although somewhat more ingenious, are no less fallacious than those which used to be proposed in a more naïve age, and are today urged in less sophisticated communities, in support of paper money issues.

When one pays 60 cents a pound for breakfast bacon that used to sell for 25 or 30 cents, and similarly for other essential commodities approximately $2 for what used to cost $1, and when one observes that this advance in prices embraces practically all commodities, one must conclude that the policy of conducting the war with the proceeds of bond issues has been a financially unsound policy.

Our experience during the past year and a half has demonstrated, it seems to me beyond any question, that bond issues are an immediate and direct occasion of inflation. At least inflation is a present condition which must be explained and justified, or it must be accepted as being incontrovertible evidence of unsound financial policy.

Government credit extended to cover the unproductive expenditures of war, has no economic basis. It has the inherent quality of indefinite expansion and inflation, just as have issues of paper money.

I will venture to say that no one of us in this room feels that he has been taxed to the full extent of his ability to pay, or even approximately to the full measure of his ability to pay. But we are all of us going to be taxed in years to come, not only to pay the cost of the war, which we have been paying once while the war has been in progress, but to pay the cost of inflation during the war, and to pay interest on an inflated valuation of that cost.

Stability of prices is as essential in war time as in peace time, and we have not preserved any fair degree of stability during the war. This seems to me greatly to our discredit. It seems to me incontrovertible evidence of unsound finance. If we now proceed to pay off the debt we must again disturb stability—if one may by courtesy use the word stability in referring to the present level of prices.

Inflation is an absolutely certain and accurate measure of unsound financial policy. It is entirely unnecessary. It distributes the burden of war inequitably—and the process of deflation is equally inequitable. Enhancement of prices in war time, except enhancement in certain lines in the process of adjustment to war demands, is indefensible. Under a sound financial policy any enhancement of prices in special lines would be offset by a decline of prices in other lines. We have not witnessed any compensating declines in any lines. In other words, we have experienced a tremendous depreciation of our currency at precisely the time when maintenance of value was of vital consequence.

Taxation wisely devised has the prime virtue of releasing labor and

capital from non-essential industries, and making this released labor and capital available for war purposes. That which the individual pays in taxes, he cannot expend for commodities or invest in non-essential activities. The power of directing the released labor and capital into war activities passes directly to the government, which is the proper agency of direction. When dependence is placed upon inflation, what assurance can be given that the government will benefit in proportion as prices are advanced to consumers? As a consumer, I should certainly prefer to pay directly to the government a tax of 30 cents a pound on every pound of bacon consumed, rather than pay 60 cents a pound on the assumption that the retailer, the wholesaler, and other distributors will pay my tax for me in full to the government, or on the assumption that in some way or other the government will receive a benefit which may fairly be assessed as worth 30 cents. Some of the 30 cents may very easily and naturally stick in hands of the various distributors and producers.

Again, none of the arguments which have been urged during the war period in support of the war-profits tax seems to me convincing. I cannot see any justification for distinguishing between war profits and other profits, and I cannot understand why all profits in every line, whether greater or less in war time than in the period immediatetly preceding the war, should not be equally subject to tax without any discrimination, the present amount or rate of profit determining the rate and amount of the tax. Why should an industry which has become highly profitable in war time be penalized by excess taxation, as compared with an industry which was highly profitable before the war and continues profitable during the war? The industry which becomes highly profitable, and also the industry which simply continues to be highly profitable, are both probably essential industries in war time. I can see no advantage whatever in complicating the administration of the tax, by making the tax in any way dependent upon prewar conditions. One of our Washington officials is credited with having a sign posted over his desk which consigns "yesterday" to a very hot place because "this is today." That pretty well expresses a correct principle for taxing war profits, or rather profits in war time and after. They should be taxed for what they are today without reference to what they were yesterday.

I find myself sufficiently in accord with the committee's conclusions regarding the details of our financial legislation, the incidences of different sorts of taxes, and the defects of our several taxation acts. As an application of generally accepted principles of public finance to the smaller issues of taxation incidences and equities, the report is illuminating.

KINGMAN NOTT ROBINS: I am assigned for discussion the subject of exemption from taxation, either partial or complete, of evidences of public debt in the hands of the holder. These securities include, of course,

U. S. Government bonds, Federal Farm Loan bonds ("instrumentalities of the U. S. Government"), state bonds, and the bonds of the various political subdivisions of the state.

I find myself in entire agreement with the findings of the committee, and what I have to say can only be in amplification of the committee's argument against tax exemption. No argument for tax exemption, except expediency, is advanced either by the committee or any proponent of the policy, so far as I am aware.

May I summarize the principal objections as follows:

1. Tax exemption runs directly counter to the accepted principle that taxation should, as far as possible, be proportionate to ability to pay. This is particularly true under the operation of a sharply graded income tax. The appeal of the tax-exempt security to investors is in proportion to their tax burdens—the greater the burden, the greater the appeal. Inevitably the market price for tax-exempt securities is fixed by the demand of those investors who escape the heaviest tax burdens by owning such securities. This market price is too high to attract other investors, with the result that the ownership of tax-exempt securities tends to con centrate in the hands of those who would otherwise pay the heaviest taxes.

The result is not only injustice to the taxpayers as a whole, because of the shifting of the burden from the shoulders of those best able to bear it; it is also costly. If the faets supported the contention that what is lost in taxes is made up by saving in the amount or rate of interest paid by the borrower, the prices for tax-exempt bonds and taxable bonds would vary in direct ratio to this apparent saving. Obviously, this is not the case. At the present market, the spread in yield between the tax-exempt First Liberty Loan and the subsequent issues is only about 1 per cent, whereas the recipients of incomes in the upper brackets under the pending revenue bill derive as much net return from th 3½ per cent tax-exempt bonds as they would from taxable bonds yielding from 10 to 12 per cent. To further illustrate, the spread in yield at the present market between the tax-exempt 5 per cent Federal Farm Loan bonds and similar securities without federal subsidy in the form of tax exemption, is from ½ of 1 per cent to 1 per cent, whereas the recipient of an income in the higher brackets of the present law gets as high a net return on these Federal Farm Loan bonds as he would on a taxable security yielding 12 to 15 per cent.

In other words, the so-called saving to the borrower afforded by the privilege of having his obligation exempted from taxation is far less than the total in taxes that this exemption costs the state, or shifts from the large to the small taxpayer.

To put this loss concretely, under the present law a tax-exempt security yields the recipient of an income of $1,500,000 to $2,000,000 a total

exemption from federal tax alone of 66 per cent. Local taxes are assessed on capital rather than on income. A tax of one-half of one per cent, or $5 on $1000, is a very modest estimate of the value of exemption from all state, county, and local taxation, which, added to the federal tax exemption, gives a total exemption of $38 every year out of the $50 total income on a $1000 5 per cent Federal Farm Loan bond. Careful observation and thorough analysis of reports from the loaning field of the banks operating under the Federal Farm Loan Act, show that over 80 per cent of their loans are now made in localities where the spread between the rate to the borrower on taxable farm mortgages and the rate on the loans of the Federal Farm Loan Banks does not exceed one-half of one per cent. In other localities, where pioneer conditions and climatic uncertainties increase the hazards, a spread of one per cent is sometimes found. In the first instance, the borrower gains $5 as compared with a loss of $38, a loss of more than seven to one. In the latter instance, the borrower gains $10 a year on a $1000 loan, or only a trifle more than one-fourth of what is lost in taxes on the $1000 bond.

Owing to the fact that there seem to be no obtainable figures on the total of outstanding tax-exempt securities in the United States, the money total of the possible loss or shifting of taxation due to these exemptions cannot be calculated. It may be illustrated, however, by the fact that if as much as one-half of the outstanding farm-mortgage indebtedness of the country were in the form of Federal Farm Loan bonds, under the present revenue law the federal government alone would conceivably lose $66,000,000 in exemptions.

The fallacy of the argument for tax exemption on the ground of expediency seems, therefore, apparent.

TABLE SHOWING THE ADVANTAGE IN YIELD OF TAX-EXEMPT BONDS AS COMPARED WITH TAXABLE BONDS OF THE SAME RATE.

	Tax %	3%	3½%	4%	4½%	5%	5½%	6%
$5,000 to $6,000	8	3.26	3.80	4.35	4.89	5.43	5.98	6.52
$10,000 to $15,000	19	3.70	4.32	4.94	5.55	6.17	6.79	7.45
$20,000 to $30,000	27	4.11	4.79	5.48	6.16	6.85	7.53	8.22
$40,000 to $50,000	37	4.77	5.55	6.35	7.11	7.94	8.73	9.52
$60,000 to $70,000	50	6.00	7.00	8.00	9.00	10.00	11.00	12.00
$80,000 to $90,000	58	7.14	8.33	9.52	10.71	11.91	13.10	14.29
$100,000 to $200,000	62	7.89	9.21	10.53	11.84	13.16	14.47	15.79
$200,000 to $300,000	64	8.33	9.72	11.11	12.50	13.89	15.28	16.67
$300,000 to $500,000	66	8.82	10.29	11.76	13.24	14.71	16.18	17.65
$500,000 to $1,000,000	70	10.00	11.67	13.33	15.00	16.67	18.33	20.00
$1,000,000 to $5,000,000	72	10.71	12.50	14.29	16.07	17.86	19.64	21.43

TABLE SHOWING INCOME TAXES, BOND YIELDS, AND TREASURY

Net Income.	Amount subject to surtax at rate shown on same line in Column C.	Rate of surtax for amount on same line Column B.	Amount of surtax on amount of same line Column B.	Normal tax of 4% on amount of same line in Column B.	Aggregate of surtax and normal tax for amount on same line Column B.
A	B	C	D	E	F
$4,000	....	....	....	....	....
5,000	$1,000	....	....	$40	$40
7,500	2,500	1%	$25	100	125
10,000	2,500	2%	50	100	150
12,500	2,500	3%	75	100	175
15,000	2,500	4%	100	100	200
20,000	5,000	5%	250	200	450
40,000	20,000	8%	1,600	800	2,400
60,000	20,000	12%	2,400	800	3,200
80,000	20,000	17%	3,400	800	4.200
100,000	20,000	22%	4,400	800	5,200
150,000	50,000	27%	13,500	2,000	15,500
200,000	50,000	31%	15,500	2,000	17,500
250,000	50,000	37%	18,500	2,000	20,500
300,000	50,000	42%	21,000	2,000	23,000
500,000	200,000	46%	92,000	8,000	100,000
750,000	250,000	50%	125,000	10,000	135 000
1,000,000	250,000	55%	137,500	10,000	147,500
1,500,000	500,000	61%	305,000	20,000	325,000
2,000,000	500,000	62%	310,000	20,000	330,000
Over 2,000,000	any amt.	63%	....	....	....

2. The injustice of tax exemption may well be regarded as an even stronger argument against tax exemption than inexpediency.

Tax exemption nullifies the equitable working of a graduated income tax, otherwise coming to be generally recognized as the most equitable of taxes in its incidence, for those required by a graduated income tax to pay the heaviest rates are the most likely to escape taxation entirely by investing their funds in tax-exempt securities.

A committee appointed by the National Tax Association to recommend a model plan for state and local taxation made the following statement on page 14 of their report, prepared for the conference of the Association, November 12-15, 1918:

We are aware that, under the unreasonable and unworkable requirements of the general property tax, it has appeared desirable in times past to exempt state and local bonds from taxation, to exempt real estate

LOSSES FROM EXEMPTIONS UNDER LAW OF OCTOBER 3, 1917.

Annual loss to National Treasury on $50 income on each $1000 5% Federal Land Bank bond at rate on same line in Columns D and E.	Net yield to investor of tax-exempt Federal Land Bank 5% bonds.	Net yield to investor of 4¼% Liberty bonds on amounts in excess of maximum exemption from surtax.	Net yield to investor of taxable 5% bonds subject to surtax and normal tax.	Net yield to investor of taxable 6% bonds subject to surtax and normal tax.	Net yield to investor of taxable 8% bonds subject to surtax and normal tax.	Rate required on taxable securities to yield 5% net as part of income shown same line Column B.
G	H	I	J	K	L	M
....	5%	4.25	5.00	6.00	8.00	5.00
$2.00	5%	4.25	4.80	5.76	7.68	5.208
2.50	5%	4.207	4.75	5.70	7.60	5.263
3.00	5%	4.165	4.70	5.64	7.52	5.319
3.50	5%	4.122	4.65	5.58	7.44	5.376
4.00	5%	4.080	4.60	5.52	7.36	5.434
4.50	5%	4.037	4.55	5.46	7.28	5.494
6.00	5%	3.910	4.40	5.28	7.04	5.681
8.00	5%	3.740	4.20	5.04	6.72	5.952
10.50	5%	3.527	3.95	4.74	6.32	6.329
13.00	5%	3.315	3.70	4.44	5.92	6.756
15.50	5%	3.102	3.45	4.14	5 52	7.246
17.50	5%	2.932	3.25	3.90	5.20	7.692
20.50	5%	2.677	2.95	3.54	4.72	8.474
23 00	5%	2.465	2.70	3.24	4.32	9.259
25.00	5%	2.295	2.50	3.00	4.00	10.000
27.00	5%	2.125	2.30	2.76	3.68	10.869
29.50	5%	1.912	2.05	2.46	3.28	12.195
32.50	5%	1.657	1.75	2.10	2.80	14.285
33.00	5%	1.615	1.70	2.04	2.72	14.705
33.50	5%	1.572	1.65	1.98	2.64	15.151

mortgages and to grant various other exemptions. All such exemptions are inconsistent with the theory of the tax we here propose, and should be discontinued as rapidly as the circumstances of each case permit. . . . The personal obligation of the citizen to contribute to the support of the government under which he lives should not be affected by the form his investments take, and to exempt any form of investment can only bring about an unequal and therefore an unjust distribution of this tax. Our reasoning applies, of course, to the exemption which agencies of the federal government now enjoy.

Tax exemption is also unjust as applied to federal issues, because it unfairly affects the market value of taxable bonds in the hands of purchasers in good faith. Moreover, it creates a distinction in the value of the securities in the hands of holders, depending on whether they are wealthy or otherwise, which is unfair to the less favored holders, especially when they are asked to buy them on grounds of patriotism.

This was especially true, for example, in the case of the 3½ per cent First Liberty Loan, the interest return on which was adjusted to the requirements of the very wealthy, although the appeal to purchase was made to rich and poor alike. Moreover, a tax-exempt bonded debt involves an inequitable distribution of the tax burden for years to come.

Tax exemption when applied to federal issues, however, is less objectionable than when applied to state, municipal, or other local group or personal obligations. In the case of the latter, benefit is limited to the one locality, group, or individual, whereas the non-taxability of the security is disadvantageous to every taxing jurisdiction where it is held. When a county of New York issues tax-exempt bonds, it shifts its burdens onto the taxpayers wherever the bonds are held. When the government makes Federal Farm Loan bonds exempt, it provides for a shifting of the farmer's burden onto the taxpayers of the entire country, and we have seen that in the shifting the burden may well have grown sevenfold. As a matter of dollars and cents, the affected taxpayers could much better afford to grant the borrowing communities and farmers a direct cash subsidy equal to the saving these borrowers enjoy from tax exemption.

3. Another objection to tax exemption is that, once instituted, it tends to force all securities to a tax-exempt status. Tax exemption, like all special privileges, is in the nature of a special favor to a group or class of the population. It purports to give that class or group a saving in interest by making their securities more readily marketable. It is clear, however, that this apparent saving is directly at the expense of the taxpayers of the jurisdiction where the tax-exempt securities are held, and indirectly at the expense of all borrowers whose securities are not tax-exempt and who must, therefore, pay a relatively higher rate of interest to make their securities saleable. Those borrowers who have not the privilege of tax exemption naturally object to the discrimination against them.

It is true that the special privilege of tax exemption has not been granted to any class of the population as a whole at the expense of the rest of the people, except in the case of the farmers who borrow from the Federal Farm Loan Banks—a very small fraction, by the way, of the farming population. But even this precedent has been followed by well-supported propositions to finance small urban borrowers by the issuance of similar tax-exempt bonds, and to create a national system of government personal credit banks (H. R. 8827), to be financed by tax-exempt issues.

The privilege of tax exemption, as granted by government, either federal or state or municipal, to one group or class in the population, is essentially a subsidy, and on the granting of such subsidies (in effect grants of public moneys—the taxpayers' moneys), Mr. McAdoo spoke truly when he said: "If we go into the money-lending business, we will

have to lend it to everybody. You cannot discriminate under our system of government."

The logical result of the progressive increase of tax-exempt issues is to deprive federal and local government of its power to levy taxes on intangible personal property. This would be a situation the reverse of desirable, and directly at variance with the enlightened attempts to more justly equalize the burden of taxation as between tangibles and intangibles. It would seem to be the only proper course for the federal government to remove all tax-exemption provisions from its own issues and those under its direction, such as the Federal Farm Loan bonds and, so far as it has power, tax all issues of the political subdivisions of the country. The protest will, of course, be violent, but the disease needs a drastic remedy before it becomes incurable.

WILLFORD I. KING: It seems to me that the thanks of the Association are due to the Committee on War Finance for the very able and well-balanced report which they have presented. I find myself endorsing almost every sentence of the recommendations made and the arguments therein are so clearly set forth that they need few additions. However, I feel that, in one respect, the committee might, with propriety, have been more radical in its recommendations. I refer to that part of the Report which deals with the taxation of corporations.

A careful reading of the Report gives me the feeling that our system of taxing corporations may well be compared to an old house offered for sale to a prospective purchaser. The house is large and roomy and, at first glance, creates a favorable impression. Unfortunately, however, the lawn requires grading and sodding, and the need for new sidewalks is imperative. The weatherboarding should be replaced. The inside of the house needs complete remodeling and finishing. Incidentally, a new furnace, new plumbing, new chimneys, and a new roof are essential. Otherwise, the house is in good condition. When finally remodeled, one can live in it with only a minor degree of discomfort. The question is, "Is the house worth repairing?"

Ordinary experience says: "No! tear the old structure down and erect in its place a building such as the prospective purchaser really desires." Is not similar drastic action, likewise, the only legitimate procedure with regard to the federal taxes on corporations?

Our committee correctly points out that these taxes have proved a fiscal success. Great revenues have actually been derived therefrom. The same argument appeals to the Oriental Sultan when he farms out taxes to his satraps, with no command except to return the required amount of money. It seems to me that the argument of productiveness is only worthy of endorsement if it is apparent that equal revenue can be obtained by no more equitable device than the one in question.

And are our present corporation taxes equitable? If so, to what

principle of justice in taxation do they conform? Is the benefit theor to be invoked? If so, where is the justice in our government's taxing corporation on war profits made before the United States entered th conflict? The governments previously at war made the profits possib and, if the benefit theory is to be followed, THEY ought to receive th revenue.

It may be said that the corporation taxes are levied in proportion t *ability to pay*. The ability-to-pay theory, however, is based upon th psychology of individuals and does not at all apply to those artificia persons called corporations. It assumes a minimum income necessar for subsistence with a constant diminution in the utility of a dollar a the income grows larger. The corporation has no psychology. It merely an intermediary for passing profits along to its stockholders. I is they, if anyone, who should be taxed according to ability to pay.

As a matter of fact, our corporation taxes seem to be based upon theory first vigorously set forth by the Berlin-financed pacifist pres which sought to hold up to ignominy and shame the corporations whic were supplying our future allies with those very sinews of war th saved the world for Democracy. We were told that these soulless co porate monsters were fattening upon the blood of men—that the suffe ing of humanity was the price of their prosperity. Unconsciously c thoughtlessly, a large part of the patriotic American public came to en dorse the view that those who profit by war should pay its costs. On i face, this proposition seems so manifestly fair that many of our keene thinkers have become convinced of its essential justice and the unprec dentedly heavy corporation taxes now levied are largely the result of th conviction.

Granting, purely for the sake of argument, the correctness of t thesis that those who profit should pay—have the corporation taxes real compelled the men who profited by war—the so-called profiteers—to fo the bill? If we do not blind ourselves to the transactions on the sto exchange, we must hesitate long before answering this question in t affirmative. What really happened in 1916? The facts appear to about as follows: The war financiers had booked their orders, count their prospective profits and heralded these gains abroad in no uncerta tones. But, at the same time, they were listening to the rumbling of t coming storm of taxes. While, however, they were advertising to t full their prospective profits, they had pulled down the curtain upon t oncoming tax burdens. As a result, war stocks boomed tremendousl The insiders unloaded upon the general public, pocketing the profi The lambs—largely men of small means—were the ones actually hol ing the stocks when the war tax was levied and the bottom dropped o of the market; hence they were the ones who really paid the tax. T punishment destined for the "profiteers" was largely shifted to the recent purchasers.

ut how could this situation have been avoided? Simply by levying individual incomes the same total amount of taxes collected from corporations. The records of corporate dividends and of transns upon the exchanges might easily have been used to ascertain the int of income secured by individuals from these sources. By plache tax entirely upon individuals, the burden might really have been rtioned according to *ability to pay*, and any genuine "profiteering" l thus have been reached.

it it will be urged that the corporation that refrains from paying lends, and hence builds up its surplus instead, goes untaxed. Well, should it not? If the proceeds are still being used for the furtherof social needs, what justification is there for taxing these profits? ong as the funds remain a part of the assets of a legitimate business, are still working for the general welfare. This being true, why vait for the day when the dividends are paid before demanding the rnment's share?

irthermore, the present system of taxes severely penalizes the efficorporation. Why should the growth of the successful concern be pered while that of the inefficient producer is fostered? Certainly, policy is entirely contrary to all of the best interests of society, for es not favor maximum output per unit of invested effort.

rhaps, however, the taxes on corporations are really designed to sh monopolies rather than to penalize those profiting by war. If so, aw should certainly exempt non-monopolistic corporations, but nothof the kind has been attempted. Monopolists and competitors are ed alike. Hence, present corporation taxes cannot be justified upon basis.

here may be valid arguments in favor of taxing corporations but, if hey have escaped my notice. Legislators naturally are led to favor taxes because they provoke so little opposition from their constits. This is the case largely because the majority of people still feel a corporation tax in some way reduces the size or absorbs a large of the burden which would otherwise fall upon the incomes of iary citizens. As a matter of fact, however, this very inability to ze that the tax must eventually all be paid out of individual income ngerous to the public welfare, even though it makes the tax popular ongress. Any tax which is paid unwittingly is always likely to fura first-class hotbed for extravagance, waste, and graft.

is manifestly impossible to go into detail in the limited time at my osal, hence I have attempted merely to suggest reasons which, to my l, furnish sufficient cause for entirely eliminating all classes of cortion taxes from the sources of revenue utilized by the federal govient.

L. Bogart: As the only member of the War Finance Committee

now present at this section meeting, I feel that it is incumbent upon me to defend the committee against some of the criticisms which have been made by previous speakers. As to President McVey's criticism [1] that the committee seemed inclined to admit the possible desirability of a federal land tax—or at least not positively to condemn it—I need only refer to the main report upon this subject. Here it is stated unequivocally that under existing circumstances the committee is opposed, to a federal land tax, though it recognized that situations might arise which would make the land tax for federal purposes at least a subject of discussion.

Two or three of the speakers have expressed regret that the report did not submit more constructive proposals, and that it was on the whole too conservative. In reply to these criticisms I wish to say, first, that the committee construed its functions as those of a war committee. As the armistice was declared before the committee concluded its deliberations, positive recommendations as to war finance seemed rather anti-climactic. And on the other hand it did not feel justified, nor indeed did it have the time, to formulate any constructive proposals for post-war finance. For this purpose it recommended the constitution by the Association, if it desired to have this matter considered, of a new committee.

In the second place, I should like to point out that the report of the committee was unanimous. It is possible to achieve unanimity in a committee of this size, dealing with so many controversial matters, only by the elimination of extreme views and agreement upon fundamental principles. Such a process of joint counsel and compromise does not in my opinion weaken the report, but on the contrary greatly strengthens it. The report is not to be regarded as the conclusion of the discussion, but rather if you will as the starting point. It is the hope of the committee that a foundation at least has been laid by this report.

[1] Manuscript of President McVey's part in the discussion was not received.

A LIST OF THE LEADING ARTICLES APPEARING IN THE AMERICAN ECONOMIC REVIEW, 1911-1918

ECONOMIC THEORY

MONEY, BANKING, AND PRICES

TARIFF PROBLEMS

STATISTICS

FOREIGN COMMERCE